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DEPARTMENT OF MANAGEMENT  
Organizes

INTERNATIONAL CONFERENCE ON INNOVATIVE STRATEGIES FOR AVIATION, LOGISTICS & SUPPLY CHAIN  
TECHNOLOGIES, BUSINESS MODELS AND RISK MANAGEMENT



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RATHINAM  
COLLEGE OF ARTS & SCIENCE

PROCEEDINGS ICALS 2022

Mahesh  
Srinivasan

Proceeding of International conference on Innovative strategies for Aviation, Logistics and Supply Chain (ICALS 2022) held on 14th Sep' 22  
Organized by Department of Management, Rathinam College of Arts and Science (Autonomous), Coimbatore.

PROCEEDINGS ICALS 2022

# INNOVATIVE STRATEGIES

## AVIATION LOGISTICS SUPPLY CHAIN

Technologies, Business Models and Risk Management

RATHINAM  
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**INNOVATIVE  
STRATEGIES** | AVIATION  
LOGISTICS  
SUPPLY CHAIN  
Technologies, Business Models and Risk Management

*Proceeding of International conference on Innovative strategies for Aviation, Logistics and Supply Chain (ICALS 2022) held 14<sup>th</sup> Sep ' 2022*

**RATHINAM**  
COLLEGE OF ARTS & SCIENCE

*Editors*

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**Prof.Srinivasan K**

**DEPARTMENT OF MANAGEMENT**

**RATHINAM COLLEGE OF ARTS AND SCIENCE**

*(An Autonomous Institution affiliated to Bharathiar University, accredited by NAAC with A++ Grade, NIRF Ranked,  
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***Learned people know that the world is pleased with education that pleases their  
minds will want to learn more.***



## **Acknowledgement**

*We are grateful to the aristocrat **Shri. Dr. Madan A Sendhil**, Chairman Rathinam Group of Institutions for his continuous encouragement. Warmth and precision guidance from **Dr.R.Manickam** Chief Executive Officer (CEO) Rathinam group of Institutions and our former principal **Dr.R.Muralidaharan** was highly significant and motivating.*

*We would also like to express our deep gratitude to **Dr. G. Srikantha Sharma** General Manager & Dean Management academy of Hindustan Aeronautics Limited (HMA) for his valuable and constructive deliberation during the inauguration of the conference. We wish to thank all conference participants for their contributions towards the success of conference and consecutive release of their proceedings. The completion of proceeding would not be able to done without members' review board from our department of management coordinating staff and all other support staff.*

*We feel proud in appreciating our student coordinators **Ms. Vidhya Swarubini R, Ms. Matheshwari EP and Ms. Maheshwari EP** of MBA whose work was perfect in conference coordination and editing process of this conference proceeding.*

*We honestly thank our members of review board and staff of department of management for their valuable support during conference and also working on proceeding. Our prayer to the almighty to energize us for all our future endeavors.*

**Editors**



## ***Prologue***

*We are very pleased to bring Proceedings ICALS 2022. This is the proceeding of International Conference held at Rathinam College of Arts and Science, Coimbatore on 14<sup>th</sup> Sep 2022. This conferences have created value to all practitioner, researchers and academicians by providing recent development in aviation, logistics and supply chain industry*

*Aviation, Logistics and Supply chain industries have wide impact on various other business many issues related to the industries explained by the various papers presented at the conference. The level of interest in the subject matter of the conference was maintained at highest level. Over 200 suitable papers were received from different part of the world in which 102 presentations held during conference simultaneously both online and offline.*

*Most of the deliberations of the conference explore various new advancement in the sector aviation, logistics and supply chain management for future businesses.*

*The conference papers, including growth of artificial intelligence that will be beneficial for managers on the highest level of organization. The Keynote speaker talk was highly appreciated. Author presented papers kept the high quality promised and the programme was chaired in a professional and efficient way by the sessions chair. These Proceedings provide the perpetual record of the event. Finally, the enduring success of this conference made us to planning for the next conference with confidence.*





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## Message from Chairman



*I always admire the sincere and team effort of “Rathinam school of management” faculty and students. This conference proceeding is the sample for team work.*

*I see Rathinam school of management have focus for long-term prospective by which I believe they have chosen sector specific theme Aviation, Logistics and Supply Chain, which is expected to “sky rock” near soon.*

*This book helps in orienting the students, academia and corporates with advance technology to re-engineer the business. concepts for rapid changes in this VUCA world.*

*The most amazing thing about this conference is the ability to learn in-person with peers who are dealing with similar transformations.*

*My best wishes for editorial and conference team for their future success and hope that this issue would be meaning and memorable in achieving its objectives.*

***I wish all the best for the release of the book***

**Dr. Madan A Senthil**  
**Chairman**  
**Rathinam Group of Institutions**



## Message from CEO & Secretary



*I, appreciate Rathinam School of Management, for conducting international conference on Innovative strategies for Aviation, Logistics and Supply Chain Technologies, Business Models and Risk Management ICALS 2022. I also appreciate and congratulate all the students and faculty participate for their efforts in publishing the conference proceeding.*

*I extended my warm wishes to team of student and faculty of Rathinam School of Management, to continue their journey on the road of academic excellence.*

*I congratulate the team for publication*

*“May the sapling grow into a steady tree and spread in the institutions”*

**Dr R Manickam**  
**CEO & Secretary Rathinam Group of Institutions**



## Message from Principal



*I congratulate all the contributors and the editorial board for bringing out the proceeding of the recent international conference held at the institution Innovative strategies for Aviation, Logistics and Supply Chain Technologies, Business Models and Risk Management ICALS2022. All this has been possible with the dedicated and strenuous efforts of the team and hard work of the organizing team.*

*I assure that Department of Management will play a meaningful role in the all future competitive times towards new heights by transferring all dreams into reality and bring education to the all people. I pray for growth and prosperity of the department and wish the faculty, staff and students to attain success in the years to come.*

**Dr. Balasubramanian**  
**Principal**





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## **A Descriptive Study on Supply Chain Management at Insource Technology Solutions-Coimbatore.**

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### **Abstract**

Supply Chain Management (SCM) is an essential element to operational efficiency. SCM can be applied to customer satisfaction and company success, as well as within societal settings, including medical missions; disaster relief operations and other kinds of emergencies; cultural evolution; and it can help improve quality of life. Because of the vital role SCM plays within organizations, employers seek employees with an abundance of SCM skills and knowledge. Basically, the world is one big supply chain. Supply chain management touches major issues, including the rapid growth of multinational corporations and strategic partnerships; global expansion and sourcing; fluctuating gas prices and environmental concerns, each of these issues dramatically affects corporate strategy and bottom line. Because of these emerging trends, supply chain management is the most critical business discipline in the world today.

### **Introduction**

The Indian economy has been growing at an average rate of more than 8 per cent over the last four years (Srinivas, 2006) putting enormous demands on its productive infrastructure. Whether it is the physical infrastructure of road, ports, water, power etc. or the digital infrastructure of broadband networks, telecommunication etc. or the service infrastructure of logistics – all are being stretched to perform beyond their capabilities.

Interestingly, this is leading to an emergence of innovative practices to allow business and public service to operate at a higher growth rate in an environment where the support systems are getting augmented concurrently.

In this paper, we present the status of the evolving logistics sector in India, innovations therein through interesting business models and the challenges that it faces in years to come.

Broadly speaking, the Indian logistics sector, as elsewhere, comprises the entire inbound and outbound segments of the manufacturing and service supply chains. Of late, the logistics infrastructure has received lot of attention both from business and industry as well as policy makers.

### **Rapid Growth of the Warehousing Sector**

- The role of a warehouse has also transformed from a conventional storehouse to an inventory management set-up with a greater emphasis on value added services.
- Warehouses now provide additional services like consolidation and breaking up of cargo, packaging, labelling, bar coding, reverse logistics etc.

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- It has emerged as a critical growth driver, leading to large investments by logistics companies for the development of warehouses and logistics parks. Warehousing and related activities currently account for about 20 per cent of the total logistics industry.
- However, it is estimated that by 2010, this proportion would increase to approximately. The traditional concept of establishing warehouses in the proximity of manufacturing facilities and raw material sourcing centers is also undergoing a transformation.

### Review of Literature

**Mohamed Zairi, (1998) "Best practice in supply chain management: the experience of the retail sector"**, European Journal of Innovation Management, Notes that the retail industry sector is currently undergoing major changes resulting from factors such as increased competition and tighter profit margins.

**Douglas M. Lambert, Martha C. Cooper, Janus D. Pagh, (1998) "Supply Chain Management: Implementation Issues and Research Opportunities"**, International Journal of Logistics Management, The, Vol. 9 Iss: 2, pp.1 – 20 In 1998, the Council of Logistics Management modified its definition of logistics to indicate that logistics is a subset of supply chain management and that the two terms are not synonymous. Now that this difference has been recognized by the premier logistics professional organization, the challenge is to determine how to successfully implement supply chain management. This paper concentrates on operationalizing the supply chain management framework suggested in a 1997 article. Case studies conducted at several companies and involving multiple members of supply chains are used to illustrate the concepts described.

**Marilyn M. Helms, Lawrence P. Ettkin, Sharon Chapman, (2000) "Supply chain forecasting – Collaborative forecasting supports supply chain management"**, Supply chain management is built on the principles of partnerships and the development and use of the connections that exist between the links of the chain to provide information that will increase the efficiency of all members in the chain. Success stories abound describing lower costs, shorter lead times and increased customer service.

**Charu Chandra, Sameer Kumar, (2000) "Supply chain management in theory and practice: a passing fad or a fundamental change?"**, Industrial Management & Data Systems Supply chain management is a major issue in many industries as firms realize the importance of creating an integrated relationship with their suppliers and customers. Managing the supply chain has become a way of improving competitiveness by reducing uncertainty and enhancing customer service. This paper analyzes various issues important to supply chain management and provides broader awareness of supply chain principles and concepts. The role of planning and coordination in complex integrated systems and information technology to synchronize the supply chain is described in a framework that creates the appropriate structure and installs proper controls in the enterprise and other constituents in the chain.

### Research Methodology

#### Research design

Research design is the plan that guides the data collection and analysis phase of the project. It is the Framework, which specifies the type of information to be collected. The required information is collected through primary and secondary data.

### **Type of the Research design:**

Descriptive research studies which are concerned with describing the characteristic of a particular concerned with the prediction with narration of facts and characteristics concerning individual group of situations are all example of descriptive research studies.

### **Source of data:**

For the purpose of this study, data from two sources will be gathered namely: -

- Primary Source
- Secondary Source

### **Method of sampling:**

- Simple random sampling

### **Sample Size:**

The samples for data collection will be of approximately 100 - 120 respondents. The data collected will be compiled for final tabulation and Interpretation.

### **Research Instrument:**

Structured questionnaire will be used to collect primary data.

### **Tools used for analysis**

- Chi – Square test
- ANOVA

### **Limitations of the study**

- Sample size does not represent the total Population.
- Time limitation is the major factor for the study.

### **Analysis and Interpretation**

### **Chi-Square Analysis Table**

#### **Hypothesis**

**Null hypothesis (H0):** There is no significant difference between having a clear logistics strategic plan and managing the supply chain successfully

**Alternative hypothesis (H1):** There is a significant difference between having a clear logistics strategic plan and managing the supply chain successfully

### **Successful supply chain \* logistics Strategic Plan Cross Tabulation Count**

		Logistics Strategic plan		Total
		Yes	No	
Successful supply chain	Not successful at all	1	6	7
	Not successful	7	3	10
	Somewhat successful	4	1	5

	Very Successful	1	0	1
Total		13	10	23

### Chi-Square Test

To check whether the various study variables differ across different experience groups, one way ANOVA was conducted. The various hypotheses being considered are

#### Null Hypothesis

H<sub>0</sub>: There is no significant difference between the experience and the various factors related to the performance of Supply chain metrics

#### Alternative Hypothesis

H<sub>1a</sub>: The respondents rating about the on-time delivery will differ across various experience level of retailers

H<sub>1b</sub>: The respondents rating about the Transportation cost will differ across various experience level of retailers

H<sub>1c</sub>: The respondents rating about the order fill rates will differ across various experience level of retailers

H<sub>1d</sub>: The respondents rating about the In-stock availability will differ across various experience level of retailers

H<sub>1e</sub>: The respondents rating about the Annual Inventory Turnover will differ across various experience level of retailers

H<sub>1f</sub>: The respondents rating about the DC cost as % of sales will differ across various experience level of retailers

### Findings

#### Findings Derived Form Chi-Square Analysis

- There is a significant difference between the age of the respondents and the method of managing the supply chain
- There is a no significant difference between having a clear logistics strategic plan and managing the supply chain successfully
- There is a significant difference between Experience and challenges faced by the retailers in implementing a supply chain

#### Findings Derived Form anova Analysis

- ❖ The respondents rating about the DC cost as % of sales will not differ across various experience level of retailers
- ❖ the respondents rating about the Safe delivery of products will not differ across various genders of retailers

### Suggestion

- **Cross Docking** –Grading of the farm produce should be moved to collection centers from distribution centers. This will allow cross docking of the farm fresh products and non-perishable products.

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- **Store Inventory Management** - currently Insource requires stores to provide the distribution centers with daily forecasts. Now, this can induce bullwhip effect at the distribution center level causing high deviations in inventory levels at the warehouse.
- **Everyday low pricing** – insource at times provides products at discounts. This induces its customers to buy more when the price is low and buy less when the price is high.
- **Procurement strategy** – Insource should additionally focus on incentivizing suppliers to produce crops on rotation basis through long term contracts. This would allow better quality produce with lesser transportation costs

### Conclusion

Logistics must continuously evolve to keep up with the changing wants, needs, and desires of an increasingly fragmented consumer base. The four capabilities outlined above will continue to be important criteria for logistic striving to achieve best-in-class status in the coming years. However, SCM executives highlighted other areas that will form the foundation for future success.

Few logistic fully understand the total cost of acquiring, transporting, storing, promoting, and ultimately selling their products. Several retailers are developing better systems that will track complete item cost profiles. That logistics that crack the code in this area will gain greater control of mark-up / mark-down decisions. We expect this type of detailed cost knowledge will lead to improved financial performance for the entire organization. “Sometimes we need to incur costs within the supply chain to deliver a benefit of greater value to the company.”

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14. Initiatives and Issues in Fresh Fruit and Vegetable Supply Chains in India

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## **Impact of Green Supply Chain Management on Competitive Advantages of Organization**

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### **Abstract**

All the global companies are now started adopting green supply chain so that challenges in the supply chain can be faced effectively and the companies can get competitive advantages in the market than the others who have not implemented green supply chain. The main purpose of the research study was to know the influence of green supply chain on the competitive advantages of the companies. A comparison is made between the green supply chain and non-green supply chain implementation in a company using paired sample t-test. The comparison is carried out using the eight factors of green supply chain. Total twenty-four companies were selected from Nagpur city. The result shows a positive impact of green supply chain in gaining the competitive advantages by the companies.

**Keywords:** Impact, Green, Supply, Chain, Competitive, Advantages, Companies

### **Introduction**

The concept of green supply chain management is developed from the concept of supply chain management. In 1950, the concept of supply chain management has been popularized. It was the time when the production costs were minimized by the manufacturers. In 1990, When the competition among the companies become very intense, the inception of the green supply chain process has been evolved so that companies can become responsible and disciplined towards the environment and should protect the resources and environment from degradation.

The concept of green supply chain management has evolved by giving importance of Green or nature in the supply chain management. So that the relation between the supply chain and importance of environment can be explained. The main purpose of the development of the green supply chain is to eliminate the usage of hazardous chemicals, reduce the wastages, optimize logistics flow, reduce carbon emission by improving the poor processes, following the required regulations regarding production and transportation, and achieve economic performance. Green supply chain is a very competitive and innovative tool for companies to reduce environmental pollution and gain sustainability by earning profits and benefiting to the environment simultaneously.

### **Related Studies**

It is a fact that the though we are growing but the at same level for producing more energy more materials are also consumed, which affects the scarcity of resources but it is also valuable for gaining competitive advantages but environment may be polluted. The Green Supply Chain arises

as a new way to look towards environment wherein less harm to the nature is considered and best practices are considered by the companies. The environmental changes have compelled the companies to rethink on the manufacturing approaches and therefore many companies are developing environmentally friendly supply chain strategies. Therefore, today Green Supply Chain has become a systematic approach for supply chain companies.

The integration of supply chain with the green concept has developed a new area of research where environment and supply chain will be in direct relation with each other. The authors from the previous researches have also shown an influence of the green supply chain on the environment. Now a day every company is planning for going green so that less harm to the environment will be done and simultaneously more and more progress can be done. Green supply chain is a way to gain competitive advantages in a market, where companies are saving the resources and managing the environment also.

### **Objectives**

The objectives of the study are as follows:

- To study about green supply chain management.
- To study about competitive advantages in green supply chain.
- To study the role of green supply chain in gaining the competitive advantages by companies.

### **Research Methodology**

The companies are selected based on who have started working on green supply chain and who were early not working on the green supply chain. So, a comparison between pre-green supply implementation and post-green supply implementation is done.

### **Sampling Methodology**

#### **A. Sampling Frame**

Research type of the study	: Exploratory research for the study.
Test Variable of the study	: Competitive advantages & Green supply chain
Population of the study	: All green supply chain companies in Nagpur city.
Sample Unit used in the study	: Green supply chain companies.
Sample Size of the study	: 24
Sampling Method used	: Random Sample Method

#### **B. Sources of Data**

Primary Data: By structure questionnaire by generating the Google form.

Secondary Data: It was taken from books, newspapers, journals.

### **Hypothesis:**

1. H0: There is no difference in the 'Brand Image' after using green supply chain.  
H1: There is a difference in the 'Brand Image' after using green supply chain.
2. H0: There is no difference in the 'New Market' after using green supply chain.  
H1: There is a difference in the 'New Market' after using green supply chain.
3. H0: There is no difference in the 'Innovation' after using green supply chain.  
H1: There is a difference in the 'Innovation' after using green supply chain.

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4. H0: There is no difference in the 'Manufacturing Process' after using green supply chain.  
H1: There is a difference in the 'Manufacturing Process' green supply chain.
5. H0: There is no difference in the 'Operational Cost' after using green supply chain.  
H1: There is a difference in the 'Operational Cost' after using green supply chain.
6. H0: There is no difference in the 'Waste Generation' after using green supply chain.  
H1: There is a difference in the 'Waste Generation' after using green supply chain.
7. H0: There is no difference in the 'Logistics Flow' after using green supply chain.  
H1: There is a difference in the 'Logistics Flow' after using green supply chain.
8. H0: There is no difference in the 'Economic Performance' after using green supply chain.  
H1: There is a difference in the 'Economic Performance' after using green supply chain.

### Data Analysis

Paired sample t-test is applied to perform data analysis of the given data.

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-Brand Image	1.83	24	.987	0.201
	Post-Brand Image	3.76	24	1.017	0.208
Pair 2	Pre-New Market	2.40	24	1.276	0.260
	Post-New Market	4.11	24	1.041	0.212
Pair 3	Pre-Innovation	2.04	24	1.282	0.262
	Post-Innovation	4.04	24	1.089	0.222
Pair 4	Pre-Manufacturing Process	2.07	24	1.131	0.231
	Post-Manufacturing Process	3.93	24	.987	0.201
Pair 5	Pre-Operational Cost	2.00	24	1.028	0.210
	Post-Operational Cost	3.86	24	.939	0.192
Pair 6	Pre-Waste Generation	2.00	24	1.167	0.238
	Post-Waste Generation	3.93	24	.987	0.201
Pair 7	Pre-Logistics Flow	2.11	24	1.241	0.253
	Post-Logistics Flow	3.76	24	.854	0.174
Pair 8	Pre-Economic Performance	2.40	24	1.276	0.260
	Post-Economic Performance	3.99	24	.951	0.194

From the above Table 1, it can be seen that there is a variation in the pre and post mean of all the eight factors, which shows that the intervention has impacted in a positive way.

### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre-Brand Image & Post-Brand Image	24	.515	.001
Pair 2	Pre-New Market & Post-New Market	24	.499	.015
Pair 3	Pre-Innovation & Post-Innovation	24	.578	.023
Pair 4	Pre-Manufacturing Process & Post-Manufacturing Process	24	.540	.023
Pair 5	Pre-Operational Cost & Post-Operational Cost	24	.578	.001
Pair 6	Pre-Waste Generation & Post-Waste Generation	24	.570	.000
Pair 7	Pre-Logistics Flow & Post-Logistics Flow	24	.573	.002
Pair 8	Pre-Economic Performance & Post-Economic Performance	24	.562	.011

From the Table correlation among the pre and post conditions green supply chain management are shown. The correlations among the pre and post conditions are positively significant.

		Paired Differences			t	Df.	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean			
Pair 1	Pre-Brand Image & Post-Brand Image	-1.930	1.259	0.257	-7.510	23	.000
Pair 2	Pre-New Market & Post-New Market	-1.710	1.480	0.302	-5.660	23	.011
Pair 3	Pre-Innovation & Post-Innovation	-2.000	1.830	0.374	-5.354	23	.021
Pair 4	Pre-Manufacturing Process & Post-Manufacturing Process	-1.861	1.396	0.285	-6.531	23	.000
Pair 5	Pre-Operational Cost & Post-Operational Cost	-1.860	1.341	0.274	-6.795	23	.010
Pair 6	Pre-Waste Generation & Post-Waste Generation	-1.931	1.532	0.313	-6.175	23	.000

Pair 7	Pre-Logistics Flow & Post-Logistics Flow	- 1.652	1.383	0.282	- 5.852	23	.001
Pair 8	Pre-Economic Performance & Post-Economic Performance	- 1.590	1.547	0.316	- 5.035	23	.023

The paired sample t-test result for green supply chain management is given in the above Table 3. All the above given pairs are significant with p value less than 0.05. Due to the means of the two conditions before and after green supply chain management implementation and the direction of the calculated t-value, we can say that there was a statistically significant enhancement in the competitive advantages of the companies after the implementation of the green supply chain management.

### Conclusion

As per the results it can be concluded that green supply chain management has a great influence in gaining the competitive advantages than the other companies who are not applying the green supply chain management. We can see the improved brand image, expansion in new market, got opportunity to innovation, optimize manufacturing process, reduced waste, optimize logistics flow and achieve economic performance.

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## Challenges and Problems Faced by Freight Forwarders

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### Abstract

Freight forwarder plays an important role in the logistics industry. A freight forwarder organizes the safe and efficient movement of goods on behalf of exporter, importer or a person or an organization. Their line of work includes activities such as dispatch shipment via carriers such as ships, airplanes, truck or trains and sometimes even packing and storage. Freight forwarders always have a long-time relationship with carriers and obtain good rates and this helps the free movement of cargo. Freight forwarders tend to create a long-term relationship with the customer. The study tries to understand the various problems and challenges faced by freight forwarders. Freight forwarders face many challenges and this leads to failure of their operations and this also leads to disruption of customer satisfaction and leads in loss of business. The problems mainly occur due to the changes in government policies and regulations, slot availability problems with liner companies, unavailability of warehouses, competition among companies, customs clearance etc. The study is done with the collection of primary and secondary data from Why wheel shipping and logistics Pvt Ltd. An in-depth questionnaire was prepared to collect data from the customers of the organization and how they felt about the organizations ability to handle some of the problems and challenges it faced and a detailed analysis was done based on the responses and customer satisfaction was also taken into consideration. On the basis of the analysis of the data it helped to understand the various problems and challenges faced by freight forwarders. The study also provides suggestions to overcome the problems and challenges faced by the organization and how it can improve its operations for better customer satisfaction and good improvement of business.

### Introduction

To move large quantities of goods across the country and around the world, Nations depend on their freight transportation system a vast network of roads, bridges, rail tracks, airports, seaports, navigable waterways, pipelines, and equipment. A freight forwarder is an individual or company that dispatches shipments via asset-based carriers and books or otherwise arranges space for those shipments. Common carrier types could include waterborne vessels, airplanes, trucks or railroads.



The movement of international freight among nations relies on a complex array of long-distance transportation services. The process involves many participants, including shippers, commercial for hire carriers, third party logistics providers, and consignees. Moreover, global trade depends on seaport and airport services to move large volumes of merchandise over long distances via a variety of transportation modes. The interaction of these services and participants is vital to successful global trade.

They typically arrange cargo movement to domestic as well as international destinations. Also referred to as international freight forwarders, they have the expertise that allows them to prepare and process the documentation and also perform related activities. Some of the typical information reviewed by a freight forwarder is the commercial invoice, shippers export declaration, bill of lading and other documents required by the carrier or country of export, import or transshipment. As an analogy, freight forwarders have been called travel agents for freight.

### **Objective of Study**

- To understand in detail about freight forwarders and their importance in logistics industry
- To understand about the various duties and responsibilities along with the range of services offered by freight forwarders.
- To understand the most common factors that hinder the success of freight forwarders in the industry.
- To study about the various problems that are faced by freight forwarders.
- To study about the various challenges that are faced by freight forwarders

### **Literature Review**

**Theodore Pelagiids, George Panagiotopoulos (2019):** Conducted an investigation on the connection between the trading of Forward Freight Agreements (FFAs) and its microstructure effects in the volatility of the spot freight market in the Capsize dry-bulk sector of oceangoing vessels. An analysis of the implications of the Capsize forward freight agreements market to the underlying spot market. Study contributes to further understanding the interrelationship between forward and spot market of a non-storable commodity as that of transportation services in a highly cyclical industry.

**Vitalii Naumov (2018):** Proposed an approach on modelling demand for forwarding services on the basis of publicly available information to estimate the numerical parameters of the requests flow as random variables of the flow characteristics, and also to determine the distribution of demand taking into account geographic regions. The study says that demand model based on the presented approach could be used as a subsystem of other more sophisticated simulation models to solve a number of problems in the area of freight forwarding.

**Roar Adland, FredEspen Benth and Steen Koekebakker (2018):** The study shows propose a new multivariate model for the dynamics of regional ocean freight rates. We show that a co-integrated system of regional spot freight rates can be decomposed into a common non-stationary market factor and stationary regional deviations. The above used discrete-time model for the joint

dynamics of regional spot freight rates is parsimonious, easy to estimate within a standard ARIMA framework, and is able to capture the main characteristics discussed in the study.

### Research Methodology

The research design adopted here is descriptive research. The sample method used for this project is simple random. In this study the entire 316 respondents have been considered as sample size. The research has utilized the questionnaire as instrument to collect the data from the respondents for this research.

### Data Analysis and Interpretation

#### Paired Samples T-Test for difference between tracking facility provided by the why wheel and Pick-up Timeliness / Reliability

Table showing the Paired Samples test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Tracking facility provided by the WHYWHEEL - Pick-up Timeliness / Reliability	-.019	.708	.040	-.097	.059	-.477	315	.634

#### Independent Sample Test on the medium through which respondents know about Why wheel (Word of Mouth/Brochure)

Table showing the Independent Samples Test

Levene's Test for Equality of Variances		t-test for Equality of Means								
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
The cooperation of why wheel	Equal variances assumed	.008	.931	.182	147	.855	.038	.208	-.373	.449
	Equal variances not assumed			.182	139.312	.856	.038	.208	-.374	.450



There are two that provide different pieces of information: (A) Levene's Test for Equality of Variances and (B) t-test for equality of means. Independent sample test value using Levene's test for equality of variance is 0.008. The significance value is 0.931 which is greater than p-value. Thus, accept alternative hypothesis and accept alternative hypothesis. There is a no significance difference between cooperation of why wheel and the way of contact with why wheel

### **Correlation for difference between rate/price competitiveness and the competition**

<b>Table showing the Correlations</b>			
		Rate / Price Competitiveness	The competition
Rate / Price Competitiveness	Pearson Correlation	1	.240
	Sig. (2-tailed)		.000
	N	316	316
The competition	Pearson Correlation	.240**	1
	Sig. (2-tailed)	.000	
	N	316	316
**. Correlation is significant at the 0.01 level (2-tailed).			

The correlation coefficient for the competition is 0.494. For survey scale type data this is pretty large. The number of respondents in the sample answering both items is 488. P-value for this correlation coefficient is .000. It's not technically zero. SPSS does not give p-values to more than three decimal places. The test has resulted 1 so it is a perfect linear correlation between the variables. Because  $p < .05$ , reject the null significant difference between rate/price competitiveness and the competition

### **Findings**

Data was collected based on random sampling and based on the analysis of the data it is found that respondent are satisfied with many services like tracking through website, billing accuracy, knowledge about import 7 export, documentation, delivery timeliness, handling cargo, the way the fluctuations of the exchange rates are handled and mainly satisfied with the way that handles unforeseen trade disruptions to trade causing new challenges.

### **Suggestions**

The organization needs to take extra care in retaining customers i.e. the CRM strategies need to be improved. The services provided can be improved and additional benefits should be provided to loyal customers. There should be extra care taken while handling cargo during these COVID situation / adhoc situations. The organization needs to expand its services to new trade routes to attract new customers. The organization should improve its marketing strategies to get a wider reach.

### **Conclusion**

There are many challenges and problems faced by freight forwarders in the shipping and logistics industry. It is identified from different angles. Tough competition that occurs among companies is one of the factors. The rapid changes in freight rates also provide a big challenge. Problems occurring due to restrictions and law changes in border, port and customs. Delay of delivering goods and due to both internal external factors are challenges that are bound to be faced by freight forwarders. To overcome these problems and challenges freight forwarders should update themselves with the new technologies and current standards, in order to meet the global customer satisfaction level.

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### **Awareness Level of Eco-Friendly Products Among Young Women in Chennai City - A Study**

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### **Abstract**

Environmental issues are very important in the current corporate climate. The majority of governments are concerned about environmental issues. Environmentally responsible growth has emerged as a major concern in modern business. Thus, one of the communication methods that an institution might use are eco-friendly products. Green marketing is the technique of promoting goods and services based on how they will help the environment. Such goods and services ought to be environmentally friendly either in their production or in their use. Environmental issues were a contributing factor in the development of green marketing. With 164 respondents, the study's main goals are to examine the knowledge of undergraduate female students about green products and pinpoint the related variables that signifies how the green products performs. The statistical tools we used for this study as percentage analysis and the analysis of ranking. The major findings show that the young women's awareness on green products is positively related with environmental and status concern and they aware on personal care products and dairy products. The findings also show that the young women's satisfactory level of using green products also good.

### **Introduction**

Environmentally friendly goods and services are referred to as green goods. As more individuals become concerned about environmental issues, it is growing in popularity. They make the decision to spend their money in a way that is more considerate to the environment. Various elements can be included in "green" products, used by young women including

- |                           |                          |                   |
|---------------------------|--------------------------|-------------------|
| 1. Home appliances        | 2. Beauty care products  | 3. Jewels         |
| 4. Personal Care Products | 5. Cloth and Accessories | 6. Dairy products |

### **Establishing Green Policies**

Implementing sustainable business methods, or concentrating marketing efforts on messages that promote a product's green benefits. Walking, bicycling, and using public transportation as opposed to driving. Due to the rising demand, this sort of marketing may be more expensive but also more successful. Consumers' needs, wants, expectations, tastes, and preferences are evolving as a result of a variety of factors, including changing lifestyles, rising family incomes, and rising consumer knowledge, among others. A new product development idea, product redesign, process design, and other modifications are required for the market to adopt some of these changes in order to survive. Design, modifications to marketing strategies, etc. As a result, the business organization produces goods that satisfy customer needs without endangering the environment.

The main cause of this transformation is mounting concern over various pollutions and other problems brought on by these impurities on Earth's surface. As a result, groups representing business, government, and consumers worldwide are seriously considering this issue. Where in

rising environmental consciousness among consumers modifies their product consumption and purchasing habits. However, commercial organizations are also reaping rewards from incorporating green practices into their daily operations. Among all these advancements, new management concepts, such as green supply chain management, waste management, reverse logistics, and green marketing, are emerging. etc., which not only satisfy customer needs but also guarantee a safe, clean, and green environment. Every person wants to because they are aware of the implications; they frequently look for green products in the market, helping to maintain the environment clean and green.

Recently, it has been observed that consumer behavior is shifting in favor of environmentally friendly products, commonly known as green products.

### **Review of Literature**

1. Ms. Deepa Inga vale and Mr. Anuradha Gaikwad (2011): A Study of Awareness for Green Marketing This essay's major goals are to investigate consumer knowledge of green marketing and to determine whether consumers are prepared to pay more for environmentally friendly goods. For the research paper, both primary data and secondary data were employed. It has been shown that 60% of individuals are generally familiar with the idea of "green marketing." Thus, using SPSS software, the posed hypothesis is established.

2. Green marketing was cited by Rouf and Rajendran (2014) as a newly developing strategy for sustainable development. Marketing professionals nowadays are attempting to leverage on consumer preferences for environmentally friendly goods and services in order to assure sustainable growth. They do this by applying these ideas when developing their strategies. Green marketing is a phenomenon that has grown particularly significant in the modern marketplace. It has become a key idea in India as well as other emerging and industrialized nations, and it is viewed as a crucial tactic for assuring sustainable growth. The primary focus of this research piece is on understanding the function and significance of green marketing for sustainable development.

3. Green Marketing on Customer Behavior Towards Usage of Green Products, by Dr. G. Nedumaran and M. Manida (2018). This study was conducted to understand the notion of green marketing and gauge customer awareness of green products. According to his research, green advertising is now crucial for an association's ability to be managed. There are several gaps in questions regarding this subject, as the writing audit has revealed.

### **Objective of the Study**

The main goal of the research is to determine how knowledgeable young women are of in green marketing.

1. To examine the knowledge of green products among college students.
2. To analyze the connection between students' family income and purchasing pattern.
3. To protect the environment.

### **Methodology**

The study's methodology is both descriptive and diagnostic. A systematic approach for collecting information and data for the intention to examine the knowledge of young women about green

products and pinpoint significant variables that influence how green products performs. Conducting survey and collecting past information are included in the research methodology.

Sampling Areas Covered for the Study	Chennai City
Data Source	Primary and secondary data
Sample size	164
Sampling Method	Stratified random sampling
Data Instrument	Well-structured questionnaire
Data collection process	Questionnaire through Google forms

Both primary and secondary data were used to create the study. The primary data is gathered from surveys given to young women, and the secondary data is gathered from online sources.

### Limitation of the Study

The Research Area was confined to Chennai City Only. Sample size was only 164.

Data were collected only from the young women

### Data Analysis

#### Demographic Profile of the respondents

S. No	Demographic variables	Frequency	Percentage
<b>1. Monthly Income</b>	Below Rs. 10,000	29	17.7
	10001-25000	40	24.4
	25001-50000	15	9.1
	50001-75000	24	14.6
	75001-100000	32	19.5
	Above 100000	24	14.6
	<b>Total</b>	164	100.0

Source: Primary data 24% of respondents earn between Rs.10001 and Rs.25000 each month.

#### Awareness of green products of the respondents

S. No	variables	Frequency	Percentage
<b>2.Level of awareness about green product</b>	Yes	85	51.8
	Somewhat	55	33.5
	Not completely	21	12.8
	No	3	1.8
	<b>Total</b>	164	100.0
<b>3. what are the green products known to you?</b>	Home appliances	18	11
	Beauty care products	21	12.8
	Jewels	10	6.1
	Personal Care Products	63	38.4
	Cloth and Accessories	21	12.8
	Dairy products	31	18.9
	<b>Total</b>	164	100.0

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<b>4. Green products are in headlines nowadays because</b>	Students are being aware of green product	102	62.2
	Company increasing competitive	27	16.5
	Companies attempt to address societies new concern	35	21.3
<b>Total</b>		164	100.0

**Source: Primary data**

- 51.8% of the respondents says that somewhat awareness about green product.
- 38.4% of the respondents known more about the personal care products.
- 62.2% of the respondents Students are being aware of green products because of the Green products are in headlines nowadays.

**One-Sample T-Test and Ranking Analysis on the purpose of using green products**

Variables	N	Mean	St. Deviation	Std. error Mean	t-value	Significance (2-tailed)	Rank
5.Concern for health	164	2.1829	1.18403	.09246	23.610	.000	4
6.To use better quality product	164	2.3232	1.02086	.07972	29.143	.000	3
7.Concern for environment	164	2.3537	1.18137	.09225	25.514	.000	1
8.Concern for status	164	2.3415	1.02986	.08042	29.116	.000	2

*Source: computed data*

From the above table, it can be seen that the mean value ranges between 2.3537 and 2.1829. It shows that the young women are using the green products for the purpose of environmental concern first. Concern for status, to use better quality product and the concern for health ranks 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> ranks respectively.

**Purchasing pattern and satisfaction level of purchasing green products among the respondents.**

S. No	variables	Frequency	Percentage
<b>9. How do you purchase green products?</b>	Not at all	17	10.4
	Sometimes	103	62.8
	Often	27	16.5
	Always	17	10.4
<b>Total</b>		164	100.0



<b>10. Purchasing mentality of the students</b>	Definitely not buy	11	6.7
	Probably not buy	63	38.4
	Not sure	60	36.6
	Probably buy	6	3.7
	Definitely buy	24	14.6
	<b>Total</b>	164	100.0
<b>11. What is your Satisfaction level towards Green Products?</b>	Very much dissatisfied	11	6.7
	Dissatisfied	5	3.0
	Satisfied	116	70.7
	Very much satisfied	32	19.5
	<b>Total</b>	164	100.0
<b>12. Preference of location to buy Green Product</b>	Local shops	49	29.9
	Retail malls	33	20.1
	Internet	50	30.5
	Tele shopping	21	12.8
	Factory outlet	11	6.7
	<b>Total</b>	164	100.0
<b>13. Concern about protection of environment</b>	Strongly disagree	6	3.7
	Somewhat disagree	5	3.0
	Neutral	47	28.7
	Agree	67	40.9
	Strongly Agree	39	23.8
	<b>Total</b>	164	100.0

**Source: Primary data**

- 62.8% of the graduates says that sometimes they have purchased the green products.
- 38.4% of the graduate's purchasing mentality is probably not buying the green products.
- 70.7% of the graduates are satisfied about the using of green products.
- 30.5% of the respondents says that they are purchasing green products through internet.
- 40.9% of the respondents were agreed that they are purchasing the green products for the protection of environment.

**Discussion**

The respondents those who earns the monthly income of Rs.10001 –Rs. 25,000 being more aware of personal care products. Most of the young females are using green products for protecting the environment and the level of purchasing green products are also satisfied.

**Future Research Possibilities**

1. The current study examines the young women's awareness towards green products in the City of Chennai. As a result, the study may be carried out in other states.

2. A study of young women's awareness toward environmentally friendly items in other different cities.

### **Suggestions**

To promote green products among young women, it is necessary to create a marketing communication campaign. Therefore, it is the duty of the government to keep an eye on the legitimacy and dependability of these campaigns, to advance and educate the young women and public about the significance and accessibility of new green products on the market, as well as to support them in understanding the environmental advantages of using them.

### **Conclusion**

According to this study, the two main factors that help to them, understand and be more knowledgeable about environmentally friendly items are the environment and health issues. The aforementioned category of respondents' awareness and environmentally friendly products are related. Consumers may benefit from green products in their diets, homes, and outdoor spaces. Buying environmentally friendly products has become popular and helps to protect our mother earth.

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## **Effectiveness of Sky Yoga Practices on Stress Management and Mindfulness (With Special Reference to Erode City).**

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### **Abstract**

Mindfulness is the basic human ability to be fully present, aware of where we are and what we're doing, and not overly reactive or overwhelmed by what's going on around us. While mindfulness is something that all naturally possess, it's more readily available to everyone by practice. Today stress management is important in everyone's lives. It's necessary for long happy lives with less trouble that will come about. There are many ways to deal with stress ranging from the dealing with the causes of stress to simply burning off its effects. SKY YOGA is a holistic, simple and a scientific approach to Yoga formulated by Vethathiri Maharishi with his profound knowledge in both Ancient Indian Yogic Practices. SKY Yoga Course totally transforms a person, giving him a new perspective on life and equips him with necessary tools to handle the mounting pressure that the modern-day society bestows upon him. In this study, the effectiveness of SKY (Simplified Kundalini Yoga) practices on stress management and mindfulness of the respondents has been analyzed and interpretations were made. For this purpose, the level of satisfaction of the



respondents towards physical and emotional wellbeing after practicing SKY considered as dependent variable and the independent variables such as age, gender, occupation, tenure of practicing yoga, time spending, etc. To find out the relationship between the dependent variable and independent variables, data are tabulated sequentially and statistical analysis is done by using two-way table and chi-square test. Weighted average score ranking analysis is done on the factor that attracts to indulge in SKY practices.

### **Introduction**

In the modern world, the main reasons for being unmindful are, first, complex multitasking and most people go through their lives being unmindful. That brings with it all sorts of problems that could simply be prevented by paying close attention to the moment and observing objectively - being mindful. Hence the study is undergone to analyze effect of sky yoga practices on stress management and mindfulness among the yoga practioners' in the Erode city. Therefore, study helps to know how practitioners are got benefited by SKY and to encourage others to practice SKY.

### **Objectives of the Study**

- To study the stress management and mindfulness level of the respondents after practicing SKY yoga.
- To identify the satisfaction level in terms of physical and emotional well-being of practitioners.
- To analyze burnout rate of the practitioners.

### **Research Methodology**

This study is systematically and scientifically organized. The validity of any study depends on the systematic method of data collection and analyzing the same in a logical and sequential order. The study has made an extensive use of both primary and secondary data. This study describes effectiveness of sky yoga practices on stress management and mindfulness in the Erode city.

**Sampling Methods and Size:** For the present study, population comprised of practitioners who are practicing SKY in Erode city has been taken. To ensure the reliability a sample size of 100 respondents were taken. This research uses convenience sampling methods for collecting the data.

### **Nature of the Data**

- a) **Primary Data** The primary data are those which are collected fresh for the first time and thus happened to be original in character. In this study, structured questionnaire was used to collect the primary data. It used both closed-ended and open-ended questions to collect primary data.
- b) **Secondary Data** Besides the primary data, the study also had made use of secondary data such as books and websites were referred for the purpose to enable better understanding of the study.

### **Tool Used for Data Collection**

Questionnaire was the main and important tool for collecting data. Hence the effort has been taken to construct the questionnaire in a systematic way with adequate and relevant questions to ensure the objectives of the study

### Tools Used for Data Analysis

The data collected from the primary sources were arranged sequentially. The data which were collected through a questionnaire were presented in a master table. From the master table, sub tables were prepared for analysis and interpretation of the data. The following statistical tools used: 1. Simple percentage analysis 2. Chi square analysis 3. Weighted average score ranking.

### Mindfulness

For the purpose of the study, the Mindfulness statement were given with the scale of Very often, Often, Sometimes, Rarely and never and the result of the percentage analysis is given below.

S.No.	Statement	Very Often	Often	Some Times	Rarely	Never
1	It is easy for me to concentrate on what I am doing	46 (46%)	32 (32%)	15 (15%)	5 (5%)	2 (2%)
2	When I do things, my mind wanders and I'm easily distracted	3 (3%)	8 (8%)	16 (16%)	40 (40%)	33 (33%)

### Stress Management

For the purpose of the study, the Stress management questions were given with the option of Yes or No and the result of the percentage analysis is given below.

S.No.	FEELING OF STRESS	NO. OF RESPONDENTS	PERCENTAGE %
1	YES	6	6
2	NO	94	94
	TOTAL	100	100

The above table depicts that 6% of the respondents are stressed, 94% of the respondents are not stressed. Therefore, it has been inferred that the majority (94%) of the respondents are not stress

### Stress Management

S.No.	Statement	Never	Rarely	Some Times	Often	Always
1	I have deep inner strength.	0 (0%)	10 (10%)	13 (13%)	16 (16%)	61 (61%)

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2	I keep going even when I am hurt.	6 (6%)	8 (8%)	10 (10%)	42 (42%)	34 (34%)
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(N - Never R - Rarely ST - Sometimes O – often A – Always)

### Interpretation

The above table no: 3 depicts that 61% of the respondents always have deep inner strength, 16% of the respondents often have deep inner strength, 13% of the respondents Sometimes have deep inner strength, 10% of the respondents rarely have deep inner strength and 0% of the respondents Never have deep inner strength. Therefore, it has been inferred that the majority (61%) of the respondents always have deep inner strength. 2. The above table depicts that 34% of the respondents always keep going even when they are hurt, 42% of the respondents often keep going even when they are hurt, 10% of the respondents Sometimes keep going even when they are hurt, 8% of the respondents rarely keep going even when they are hurt and 6% of the respondents Never keep going even when they are hurt. Therefore, it has been inferred that the majority (42%) of the respondents often keep going even when they are hurt.

### Maslach Burnout Inventory

For the purpose of the study, the burnout inventory statement was given with the scale of Not at all, Rarely, Sometimes, Often, Always and the result of the percentage analysis is given below.

S.No.	Statement	Never	Rarely	Some Times	Often	Always
1	I am easily irritated by small problems.	70 (70%)	18 (18%) 1	12 (12%)	0 (0%)	0 (0%)
2	I felt that I am achieving less than I Should.	40 (40%)	29 (29%)	19 (19%)	12 (12%)	0 (0%)

(N - Never R - Rarely ST - Sometimes O – often A – Always)

The above table depicts that 12% of the respondents Sometimes are easily irritated by small problems, 18% of the respondents Rarely are easily irritated by small problems and 70% of the respondents are Not at all easily irritated by small problems. Therefore, it has been inferred that the majority (70%) of the respondents are Not at all easily irritated by small problems. The above table no: 4 depicts that 12% of the respondents are often felt that they are achieving less than they should, 19% of the respondents Sometimes are felt that they are achieving less than they should, 29% of the respondents Rarely are felt that they are achieving less than they should and 40% of the respondents are Not at all felt that they are achieving less than they should Therefore, it has

been inferred that the majority (40%) of the respondents are Not at all felt that they are achieving less than they should. Tenure of Practicing Yoga Vs Level of Satisfaction In Terms Of Physical And Emotional Well-Being There is no significant relationship between the tenure of practicing yoga and satisfaction level towards physical and emotional well-being after practicing SKY practices. With a view to find the degree of association, two -way table is prepared.

**Tenure of Practicing Yoga Vs Level of Satisfaction in Terms of Physical and Emotional Well-Being (Two-way table)**

Tenure of practicing yoga	level of satisfaction in terms of physical and emotional well-being					Total
	highly satisfied	satisfied	neutral	dissatisfied	highly dissatisfied	
More than 1 year	20 (24.07)	8 (4.64)	1 (0.29)	0 (0)	0(0)	29
2-3 Yrs.	39 (39.01)	8 (7.52)	0 (0.47)	0 (0)	0 (0)	47
3-4 Yrs.	11 (9.13)	0 (0)	0 (0)	0 (0)	0 (0)	11
More Than 4 Years	13 (10.79)	0 (0)	0 (0)	0 (0)	0 (0)	13
Total	83	16	1	0	0	100

**Interpretation**

The above table no: 5 states that, the value of “highly satisfied “category is highest (39) among the respondents of more than 1 year and it is lowest (11) among the respondents of 2-3 years. The level of “Satisfied” category is highest (8) among the respondents of more than 1 year and 2-3 years and it is lowest (0) among the respondents of 3-4 years and more than 4 years. The level of “Neutral” category is highest (1) among the respondents of more than one and it is minimum (0) among the respondents of all other years. The level of “Dissatisfied” category is minimum (0) among the all the respondents. The level of “Highly Dissatisfied” category is minimum (0) among the all the respondents. Thus, the table shows that majority (39%) of 2-3 years’ respondents are highly satisfied in terms of physical and emotional well-being after practicing SKY practices. In order to find out relationship between the tenure of practicing yoga and satisfaction level towards physical and emotional well-being after practicing SKY practices. The following hypothesis was framed and tested with the help of chi-square test and the result is shown in the following table. H0: There is no significant relationship between the tenure of practicing yoga and satisfaction level towards physical and emotional well-being after practicing SKY practices. H1: There is significant relationship between the tenure of practicing yoga and satisfaction level towards physical and emotional well-being after practicing SKY practices.

**Tenure of Practicing Yoga Vs Level of Satisfaction in Terms of Physical And Emotional Well-Being (Chi-square test)**

FACTOR	CALCULATED VALUE	TABLE VALUE	DEGREE OF FREEDOM	RESULT
Tenure of practicing yoga	10.2759	21.096	12	ACCEPTED

### Interpretation

From the above table no: 6 it is detected that the calculated value (10.2759) is less than the table value (21.096) at 5% level of significance. Hence the null hypothesis is accepted and it can be concluded that there is no significant relationship between the tenure of practicing yoga and satisfaction level towards physical and emotional well-being after practicing SKY practices

### Findings

It has been noted that the majority (47%) of the respondents Tenure of practicing yoga is 2-3 years.

It has been noted that the majority (89%) of the respondents Time spending on yoga is 1-2hrs.

It has been noted that the majority (85%) of the respondent's important part of SKY is all the above (Physical exercise, Meditation, Kaya kalpa and Introspection).

It has been noted that the majority (79%) of the respondents Time of practice is Morning.

It is founded that the majority (46%) of the respondents Very often concentrate on what they are doing.

It is founded that the majority (50%) of the respondents Very often loving towards them self when they in emotional pain.

It is founded that the majority (46%) of the respondents Very often concentrate on what they are doing.

It is inferred that the majority (40%) of the respondents sometimes distracted easily.

It is inferred that the majority (94%) of the respondents are not stressed.

It is inferred that the majority (61%) of the respondents always have deep inner strength.

It is inferred that the majority (42%) of the respondents often keep on going even when they are hurt

There is no significant relationship between the tenure of practicing yoga and satisfaction level towards physical and emotional well-being after practicing SKY practices.

### Conclusion

By doing sincere SKY practice, the aspirant can advance from the limited body consciousness to soul consciousness and culminating to God consciousness. SKY practices reduce the mental frequency to subtler levels, providing clarity, strength purity of mind, increases intuition and lucidity of mind. Thus, helps to manage stress, achieve mindfulness and emotional wellbeing.

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## International and cross border-freight transportation

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### Abstract

Amyotrophic lateral sclerosis (ALS) disease state prediction usually assumes linear progression and uses a classifier evaluated by its accuracy. Since disease progression is not linear, and the accuracy measurement cannot tell large from small prediction errors, we dispense with the linearity assumption and apply ordinal classification that accounts for error severity. In addition, we identify the most influential variables in predicting and explaining the disease. Furthermore, in contrast to conventional modelling of the patient’s total functionality, we also model separate patient functionalities (e.g., in walking or speaking).

### Introduction

Despite medical and clinical progress since its discovery 150 years ago, the inner workings and mechanisms of amyotrophic lateral sclerosis (ALS) remain largely unknown. However, it is understood that extending life expectancy and improving the quality of life of those afflicted depend on our understanding of the disease pathogenesis.

Machine learning (ML) has proven highly beneficial in the past when used for medical diagnosis and prediction from data. Lavrac extensively describes the potential value of new and useful knowledge that can be derived by applying ML to large collections of medical data. Kononenko provides an overview of intelligent analysis in medicine from an ML perspective, and further discusses future trends and the importance of ML in the medical research community, demonstrating that performance of algorithms such as semi-naive Bayes and neural network classifiers can improve upon physicians’ reliability of diagnosis with regard to ischemic heart disease. Others compare ML algorithms that predict mortality among patients with pneumonia and show that low predictive error rates can be achieved. The ability to predict mortality in pneumonia patients is useful to clinicians in making decisions regarding the optimal location for patient treatment. Lerner et al., discuss how training the linear classifier, naive Bayesian classifier, multi-perceptron neural network, Bayesian neural network, and support vector machine based on well-discriminating features can achieve accurate classification of fluorescence in situ hybridization signals, which can in turn lead to useful detection of genetic abnormalities. Also, in a recent special



issue of the Journal of Clinical Medicine, “The Future of Artificial Intelligence in Clinical Medicine”, close to 25 (!! ) papers were published just on the use of ML in medicine.

In this study, we used ML algorithms and the Pooled Resources Open-Access Clinical Trials (PRO-ACT) database, which is the largest ALS clinical trials database ever created to build models that can effectively predict and analyze the ALS disease state as represented by the ALS functional rating scale (ALSFRS). ALSFRS is an accepted rating system used to monitor and measure patients’ disease state. It comprises ten items, each representing another patient functionality (e.g., in walking, swallowing, and breathing). Each ALSFRS item holds a value between 0 and 4 (0 representing complete inability with regard to the function, and 4 representing normal function), and the collection of these item values represents the patient’s disease state at a given time, and thus is a true descriptor for this state in designing prediction models. For the prediction, we employed physiological and lab test variables that were measured in the current and past clinic visits.

### **Background to ALS**

ALS is a devastating illness with an unknown pathogenesis. It is an idiopathic fatal neurodegenerative disease of the human motor system. Despite medical and clinical progress in recent decades, the disease is still not visibly affected by the different therapies available today. ALS attacks both the upper and lower motor neurons. Its overall pathological hallmarks are the degeneration and loss of motor neurons with astrocytic gliosis. Clinical features include loss of neurons at all levels of the motor system: from the cortex to the anterior horn of the spinal cord and motor nuclei in the brainstem. In recent years, advancements in multi-modal neuroimaging have confirmed that ALS is a multi-system neurodegenerative disease involving, not only the motor system, but also the frontal cortex and other structures. The recently developed Braak neuropathological staging system has shown that ALS disseminates in a sequential regional pattern from the precentral motor cortex, brainstem motor nuclei, and spinal cord motor neurons to prefrontal areas, postcentral cortex and basal ganglia, and lastly to the temporal cortex, including the hippocampus.

ALS is a rare disease; approximately 2 out of 100,000 people will be diagnosed with it every year. ALS is mainly a sporadic disease (i.e., the cause(s) of the disease are unknown), but about 10% of ALS cases are familial. Familial ALS is more easily identified when there is a positive family history, but in the absence of such history, an early age of onset, atypical rapid or slow disease progression, pure lower motor neuron presentation, or the presence of dementia may alert to a familial etiology. Although approximately 60% of the genes associated with familial ALS have been identified, the classification of sporadic and familial ALS is not clear because the same gene mutations may account for both types.

Onset in ALS is normally after the age of 40. In around 75% of ALS cases, onset is in the limbs, and the remaining cases are bulbar-onset. The course of the disease is inexorably progressive, with 50% of patients dying within three years after onset, and about 20% of patients surviving between five and ten years. Among recorded symptoms are weakness (which may start in the hands or legs),

slurred speech, dysphagia, dyspnea (shortness of breath), cognitive changes, sialorrhea (excess of saliva), depression and anxiety, and sleep disturbance. The course of the appearance of these symptoms differs from patient to patient, as does the rate of disease progression. Some studies show that the disease progression rate is heterogeneous, and that there may be sub-groups of patients that exhibit similar progression rates and patterns.

### **Methodology**

The methodology of this research is based on the accepted CRISP-DM (Cross Industry Standard Process for Data Mining) methodology. The methodology represents an iterative work process that includes a business (which is medical in our case) understanding of the problem at hand, understanding the database, preparation of the data, modelling, evaluation of the model, and deployment.

### **Data Understanding: The Pro-Act Database**

Data used in the preparation of this article were obtained from the PRO-ACT Database. In 2011, Prize4Life, in collaboration with the Northeast ALS Consortium, and with funding from the ALS Therapy Alliance, formed the PRO-ACT Consortium. The data available in the PRO-ACT Database has been volunteered by PRO-ACT Consortium members. The PRO-ACT database houses the largest ALS clinical trials dataset ever created, merging data from existing public and private clinical trials. The database contains over 8500 unique clinical patient records from 17 late-stage industry and academic clinical trials.

The database was received in the form of several different data tables. One of the challenges of working with the database is the heterogeneity of the tables, where each one may contain a different number of patients. A patient may or may not appear on a given table, and even on the same tables, different patients might have had different data collected about them. This is apparently due to the data collection process, which may vary greatly from one trial protocol to another. We distinguished between three types of variables in the database:

**Static variables:** Variables for which values were determined in one clinic visit and were no longer tested in later visits. These variables are fixed per patient and cannot change over time. Some examples are gender, ethnicity, time of onset, and diagnosis.

**Temporal variables:** Variables whose values can change over time. They were tested at multiple clinic visits throughout the trials, and appear several times for each patient. Examples of these are pulse, blood pressure, weight, and laboratory test results.

**Target variables:** The ALSFRS values for ten items. They too were measured in all clinic visits during the trial, and therefore are considered temporal data. We created the distinction between these and the regular temporal variables, as ALSFRS items have the role of target variables.

### **Data Preparation**

One of the biggest challenges that arose from working with the database was missing data. As mentioned above, the PRO-ACT database was collected by merging data from existing public and private clinical trials. This method of collection inevitably leads to inconsistencies in the data collected and missing values. Missing data were dealt with in several fashions.



As this study views the ALSFRS values as true depicators of the disease state in the database, and thus, as the target variable, records of all patients who did not have these values documented were rendered unusable for our purposes, a total of 4838 records of patients remained to be used in the training of the models.

Where it was possible to complete large portions of the missing data using external sources and medical consultation, data were completed. Such was the case for the FVC data table. FVC is an accepted medical test for determining respiratory capacity, which is shown to be a meaningful predictor of ALS survival. For many patients, only the absolute value of the test was available, whereas the ratio between this value and the normal value in the overall population is the more meaningful predictor, yet was largely missing from the database (68.59% missing). By converting the absolute value to the percent of the normal value (using a normal values table supplied by Prize4Life), we were able to complete a large portion of the missing data. (After completion, only 0.43% of the values were missing).

### **Experimentation**

In accordance with the Introduction section, the goals of the experiments were: (1) to construct models that can accurately map important vital signs and laboratory test variables to disease state measured at present or in the future, additionally gauging the effect of adding time-dependent information on model performance; (2) to propose and test algorithms that let the ordinal information contained in the disease state to augment learning to account differently for different prediction errors; (3) to find important variables that can accurately predict and informatively explain the disease state, and to construct models that can depict how these variables influence disease state and are related to each other; and (4) to apply previous goals to each patient functionality separately to help focus the clinical diagnosis of disease progression on different mechanisms of the disease.

To this end, we trained ML models in three different “semi-temporal” settings for each of the ALSFRS items using both multi-class and ordinal classification algorithms. In each, the models are trained to predict the ALSFRS values at the time of the last clinic visit for the patients.

**Bayesian Network-Based Explanation Analyses** of the supervised classification models have helped to pinpoint important physiological and lab test variables, and to map them to different aspects of the disease. However, this analysis is limited in that we cannot see interactions between these predictors or understand context and flow of influence within the models. Fortunately, BNs allow us to model the problem in such a way that exposes higher level interactions and relationships between variables, and between them and the target variable.

### **Analysis of Variable Value Combinations**

Based on the MBs, we analyzed distributions over value combinations of important variables included in the MB with respect to the different aspects of the disease (ALSFRS items). If the MBs were small enough, we could simply analyze combinations for all variables in the MB of each function. However, since nearly all BNs yielded moderate-sized MBs, which are intractable to

analyze in this manner, we incorporated knowledge from our own predictor importance analysis to derive sets of four important variables selected from the MB for each function.

### Conclusion

One contribution of this study with regard to prediction models is the construction of well-performing models that make no assumption regarding disease progression behavior and are able to effectively map from physiological and laboratory information directly to disease state at some given time in the future. Another contribution of this study is the exploitation of ordinal classification models to improve predictive performance, something that, to the best of our knowledge, has not been demonstrated in past research.

Furthermore, past research has mainly viewed the disease state as a sum of the ALSFRS items. In this study, we demonstrated the value of modelling the disease aspects separately (as depicted by the individual items). By doing this, we could map specific variables as being important with regard to certain aspects of the disease, while demonstrating little or no relation to others.

Another contribution of this study is an in-depth analysis of potentially important physiological and laboratory variables. We used ML techniques to identify such variables, some of which have not been previously identified in the literature as being related to ALS. Among these are creatinine, CK, and phosphorus, which were only recently identified as related to the disease, and chloride, alkaline phosphatase, and others, which are, to the best of our knowledge, not currently identified with ALS.

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### International Cross Border Freight Transportation

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### Abstract

As we know that transportation networks have become one of the major lifelines of modern societies ensuring individual wellbeing and economic growth and the direct relationship between transportation and economic productivity boosts companies' economies. So, in the last few years there has been a substantial increase in cross border transportation on the global trade which had automatically led to a platform of opportunities for internationalization for many companies. Here our paper covers some important topics about cross border like challenges faced during cross border processes and also, we will come through the methods and techniques used to minimize international border risk and how these cross-border shipping helped the companies to expand their business. Some of the major points from our paper is that cross border specifies a good economic position for the company or the business in the market. Through this paper work we can understand how the cross-border process are done in an effective and efficient way and how they are an active participant for strengthening a company's goodwill and economic position in this competitive sector. It also

offers an overview of how the professionals handle the inherent complexity of international order delivery process so that the cargo moves across borders safely and on time.

### **Introduction**

A business might be started at small or medium levels but after being in the market for sometimes a business wishes to expand its market globally, so this is where cross border comes into action. Cross border is nothing but the delivery of goods from one country to another country through transportation like air and sea freight. So, in this paper we are going to give the detailed information about cross border and its related topics.

### **Briefings On Cross Border**

Cross border is nothing but the delivery of goods from one country to another country through transportation like air and sea freight. Here there is no inventory are required to be stored at the destination country The order won't have to undergo storage in a destination/local warehouse. Instead, it would go straight to the distribution partner's hub right before delivering the parcel straight to the customer's address. and the goods will only be loaded based on the sales basis and according to the order list. After landing in the destination there it goes through customs, import duties and other legalities. Getting a 3PL would help a lot in doing all these heavy works. All the invested costs will be incurred through sales and customers will have a long lead time.

### **Fees Involvement in Cross Border Fulfilment**

The first and foremost fee involvement in cross border fulfilment is the freight which mostly depends on the volume of the freight. The next major fee involvement happens because of customs, duties and taxes and these taxes will vary from one country to another. Insurance returns and funds also do have a lot of fee involvement but as said in the previous one all the invested costs will be incurred through sales.

### **Challenges Faced in International Cross Border Transportation**

There are a wide range of challenges being faced during the cross-border process they are as follows:

#### **1.Tracking Issues:**

Tracking is one of the major processes and its data plays a major role but nowadays there are inaccuracy in the data that are provided and sometimes we are not able to track during fast movements.

#### **2.Customs Procedure:**

One of the common custom problems is submission of wrong documents and non-submission of important documents. Customs of some ports have strict rules regarding packaging of cargoes or consignments. If the packaging material is unsuitable, the cargo may not reach the final consignee.

#### **3.Payment Methods:**

Providing the customer with a seamless payment platform is tough. Often brands tend to lose potential customers as they fail to provide a smooth payment gateway. When it comes to payment preferences, it varies a lot in different regions. According to research, practically fifty

percent of the eCommerce transactions are cash on delivery in India. On the other hand, in North America, the payment preference is dominated by debit/credit cards.

### **Solutions to the Challenges**

#### **1.Tracking Issues:**

Technology is making the transportation job easier by overcoming the inefficiencies and shortcomings. The new technologies are emerging to solve the transportation tracking problems and meet the challenges by bridging the gap by real-time information flow. These can be done through TMS [TRANSPORTATION MANAGEMENT SYSTEM]. A transportation management system (TMS) is a logistics platform that uses technology to help businesses plan, execute, and optimize the physical movement of goods. With the help of TMS there is an improvement in visibility and security, especially in transit. And time savings—fewer manual steps result in fewer delays and faster delivery times. The ability to track freight, both locally and globally, on a single platform. It provides better import and export compliance minimizing penalties and shipment delays.

#### **2.Customs Procedure:**

Experiencing problems with customs is very common in cross-border shipping and can include issues such as border delays, incomplete or incorrect paperwork, unforeseen costs, and more. Such problems can negatively impact client relationships, revenue, operations, and more. Companies must ensure that their operations team is fully informed on the current requirements and processes as well as implement solutions through TMS tools, to help avoid these issues. A dedicated department for customs procedures dealing with regulations and compliances may be necessary. The shipper should have the required documents at the required time or pre submission of the documents are mostly encouraged. If any damaged goods found the exporter will need to make arrangements to ship replacement goods and make sure the goods are checked and approved properly.

#### **3.Payment Methods:**

Having a single payment gateway for both the domestic and international payments is not only expensive but also prone to failure. Therefore, do thorough research on the payment preferences in your region and choose the method that is best suited for your business. Sellers need to be acquainted with different selling methods before they begin with the actual selling.

### **How to Minimize Cross Border Risk**

#### **1.Mode of Transportation:**

Transportation is an integral part of Logistics. A company cannot function well without being able to ship products across the supply chain. It also allows companies to cross geographic lines between where products are produced and where they are consumed. While selecting the mode of transportation product size is one of the most important. Product value and transportation speed are other considerations in selecting a suitable mode of transportation. Mostly we should choose the most effective and efficient one.

#### **2.Warehouse Location:**

Warehouses should be located close to the border where they can be easily accessed. Warehouses that are close to borders allows for shorter transit time and fewer delays. Just-in-time logistics can be enabled because the shorter distance translates to shorter transportation time. Parts and materials that need final production in Canada or Mexico can be ready within a day as opposed to several days from other locations, which improves efficiency.

### **3. Usage of Technology:**

Use Technology to Your Advantage. Investing in technology that assists with handling capacity, disruptions, and delays is a necessary part of the equation. Technology provides a way to be able to monitor cross-border shipping operation. Systems like a TMS (Transportation Management System) give access to the supply chain with real-time visibility. This identifies where the route, operations, or trailer space can be improved.

### **4 Steps in Cross Border Transportation**

#### **Step 1: Find the Right Fulfillment Location**

We have to position our inventory as close to the customer base as possible. third party fulfilment will be helpful to set our bases

#### **Step 2: Do the Paperwork Ahead of Time:**

Paperwork is one of the most common stumbling blocks at customs. These blocks can be avoided by using a third-party logistics company to handle the paperwork.

#### **Step 3: Choose the Simplest Approach to Duties and Taxes:**

Duties can be a big stumbling block at customs. This can also be avoided by outsourcing the works related to duties and taxes.

#### **Step 4: Localize Your International Logistics as Much as Possible:**

We should adapt our products and services according to the regions. Proper localization can speed up the process, and help your customers avoid unnecessary delays and costs.

### **Benefits of Cross Border Shipping**

If we use the most cost-efficient techniques and services that will benefit the supply chain model with cross-border shipping, you can take advantage of lower inventory costs.

When you're shipping a parcel to a destination country, you'd no longer have to incur the cost of having it stored at another warehouse before it reaches the end-customer. This also means that the package won't sit in a single location for a long time period, making it prone to delivery delays.

Cross-border shipping also offers you a higher level of flexibility compared to the usual model. This is because you have the option of shipping to different countries across the world. On the side of your customers, they wouldn't be limited to the usual items that they'll find on your eCommerce platform. Instead, they have the option of choosing from a wide variety of selections that are far cheaper to ship, compared to the usual supply chain model.

Due to the flexibility of cross-border shipping. It also gives you the chance to expand your customer base further. You're no longer limited to a few sets of locations. In fact, you could have your products shipped to virtually any location across the globe.



With a larger customer base, you have the opportunity of tapping into previously untapped markets. Not only does this diversify your audience, but it also allows you to strengthen your manufacturing as well as research and development efforts in order to create demand in other areas.

#### **If You Are Trying to Do Cross Border This Describes What You Should Do**

- If a company has ambitions to grow worldwide, they needed the right logistics partner to handle cross border fulfilment while keeping costs low. The challenge is to manage cross border deliveries to ensure orders are delivered on time.
- We need network of trusted partners for cross border fulfilment and we have to check whether is there a storage setup in an ambient space. And also check the integration to external systems for seamless flow of orders and inventory statuses.
- Identifying regional delivery partners that can provide the service.

#### **Results of These Would Be**

- Timely delivery of cross border shipments
- Speed up custom clearance from respective countries with the proper integration in place we achieved a seamless flow of orders from customer's order management system fulfilment done efficiently

#### **Conclusion**

International Cross-border comes with immense opportunities as well as challenges. However, the opportunities it provides outdo all the challenges and difficulties. International Cross border is a path that suggests absolute success if used accordingly. knowledge along with the new technological innovations. If you master these two elements your business is most likely to succeed with huge scale profit. International Cross border is a broader aspect that opens up the path of success that has no end to it.

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### **A Holistic Review on Policy Development on tourism after the Covid – 19 Pandemic**

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#### **Abstract**

The tourism sector is a main driver of economic growth and an engine for job formation. In recent decades, it has practiced continued expansion and diversification and has turn out to be one of the largest and fastest-growing economic sectors internationally. After years of growth and growth in the sector, the COVID-19 pandemic has had a devastating blow on tourism enterprises, the livelihood of tourism workers and the communities and countries that rely on tourism. The

pandemic and the subsequent limits placed on travel and tourism in order to measure the spread of the COVID-19 virus have exposed the fragility of the sector and its vulnerability to shocks. These actions are essential, but to revive the tourism economy successfully and get business up and running, more wants to be done in a synchronized way as tourism services are very interdependent. Looking ahead, the measures put in place today will shape of tourism. The crisis is an occasion tore think for the future. Domestic tourism is serving to soften the blow, at least partially, and governments have taken inspiring action to restore and re-activate the sector, while defending jobs and businesses.

### **Introduction**

The coronavirus (COVID-19) pandemic has the immediate and immense shock to the sector. COVID-19 impact to 60% decline in international tourism in 2020. This could rise to 80% if recovery is delayed until December. The impact of the crisis is being felt throughout the entire tourism eco system, and reopening and rebuilding destinations will require a joined-up approach. Governments and industry are focusing their efforts on:

- Lifting travel restrictions and working with businesses to access liquidity supports, apply new health protocols for safe travel, help to diversify their markets.
- Restoring traveler confidence and stimulating demand with new safe and clean labels for the sector, information apps for visitors and domestic tourism promotion campaigns.
- Preparing comprehensive tourism recovery plans, to rebuild destinations, encourage innovation and investment, and rethink the tourism sector. these actions are essential, but to reopen the tourism economy successfully and get businesses up and running, more needs to be done in a coordinated way as tourism services are very interdependent. Looking ahead, the measures put in place today will shape tourism of tomorrow. Governments need to already consider the longer-term implications of the crisis to build a stronger, more sustainable and resilient tourism economy. The crisis is an opportunity to rethink tourism for the future.

### ***Tourism and Covid-19 – Unprecedented Economic Impacts***

- Tourism is one of the world's major economic sectors. It is the **third-largest export category** (after fuels and chemicals) and in 2019 accounted for **7% of global trade**.
- For some countries, it can represent over 20% of their GDP and, overall, it is the third largest export sector of the global economy.
- Tourism is one of the sectors most affected by the Covid-19 pandemic, impacting economies, livelihoods, public services and opportunities on all continents. All parts of its vast value-chain have been affected.
- **Export revenues from tourism could fall by \$910 billion to \$1.2 trillion** in 2020. This will have a wider impact and **could reduce global GDP by 1.5% to 2.8%**.
- **Tourism supports one in 10 jobs** and provides **livelihoods for many millions more** in both developing and developed economies.

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- In some Small Island Developing States (SIDS), tourism has accounted for as much as 80% of exports, while it also represents important shares of national economies in both developed and developing countries.

#### **Massive Impact on Livelihoods**

- As many as **100 million direct tourism jobs are at risk**, in addition to sectors associated with tourism such as labor-intensive accommodation and food services industries that provide employment for 144 million workers worldwide. Small businesses (which shoulder 80% of global tourism) are particularly vulnerable.
- **Women**, who make up 54% of the tourism workforce, **youth and workers in the informal economy** are among the most at-risk categories.
- No nation will be unaffected. Destinations most reliant on tourism for jobs and economic growth are likely to be hit hardest: SIDS, Least Developed Countries (LDCs) and African countries. In Africa, the sector represented 10% of all exports in 2019.

#### ***Preserving The Planet -- Mitigating Impacts on Nature and Culture***

The sudden fall in tourism **cuts off funding for biodiversity conservation**. Some **7% of world tourism relates to wildlife**, a segment growing by 3% annually.

This places jobs at risk and has already led to a **rise in poaching, looting and in consumption of bushmeat**, partly due to the decreased presence of tourists and staff. the impact on biodiversity and ecosystems is particularly critical in SIDS and LDCs. In many African destinations, wildlife accounts for up to 80% of visits, and in many SIDS, tourism revenues enable marine conservation efforts.

Several examples of community involvement in nature tourism show how communities, including indigenous peoples, have been able to protect their cultural and natural heritage while creating wealth and improve their wellbeing. The impact of COVID-19 on tourism places **further pressure on heritage conservation as well as on the cultural and social fabric of communities**, particularly for indigenous people and ethnic groups.

For instance, **many intangible cultural heritage practices such as traditional festivals and gatherings have been halted or postponed**, and with the **closure of markets for handicrafts, products and other goods**, indigenous women's revenues have been particularly impacted.

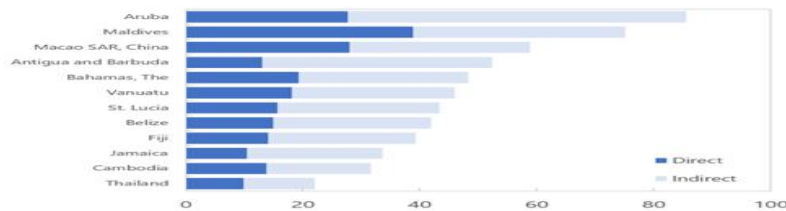
90% of countries have closed World Heritage Sites, with immense socio-economic consequences for communities reliant on tourism. Further, **90% of museums closed and 13% may never reopen**.

#### **TOURISM IN A POST-PANDEMIC WORLD**



### Countries most reliant on tourism

Tourism plays an important economic role for many countries in the Asia-Pacific and Western Hemisphere.  
(share of GDP, percent)



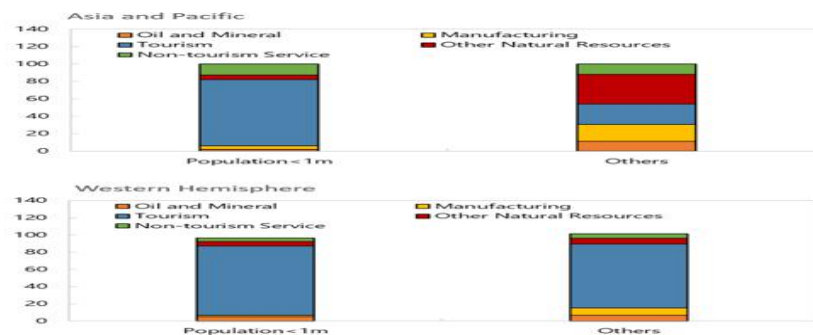
Sources: Oxford Economics Research; and World Travel and Tourism Council.

Note: 2018 data. "Direct contribution" refers to total spending on travel and tourism by residents and nonresidents and government spending on travel and tourism. "Indirect and induced contributions" include investment spending, collective government spending and domestic supply chain purchases by sectors dealing with tourists.

### INTERNATIONAL MONETARY FUND

### Tourism-dependent countries could do more to diversify their exports

Tourism exports per capita are especially high in small states.  
(composition of exports in tourism-dependent countries; percent)



Source: UN Comtrade database.

Note: Averages in 2016–18.

### INTERNATIONAL MONETARY FUND

To recover, vaccines will need to be widely distributed, and policy solutions implemented. Some governments have been providing financial support, either directly or through soft loans and guarantees to the industry. Thailand allocated \$700 million to spur domestic tourism, while Vanuatu offered grants to small and medium-sized enterprises. Countries have also been assisting firms to adapt their business models and retrain staff. In Jamaica, the government gave free online training certification classes to 10,000 tourism workers to help improve their skills.

However, many tourism-dependent economies are hampered by limited fiscal space. New initiatives to reignite the sector could perhaps help. In Costa Rica, for example, national holidays have temporarily been moved to Mondays to boost domestic tourism by extending weekends. Barbados introduced a 'Welcome Stamp' visa—a one-year residency permit that allows remote employees to live and work from the country. Similarly, Fiji launched a Blue Lanes initiative that allows yachts to berth in its marinas after meeting strict quarantine and testing requirements. Post-pandemic, a continuing shift toward ecotourism—a fast-growing industry focused on conservation and local job creation—could give an additional boost to the industry. This is already a key element of Costa Rica's tourism strategy. Thailand too is trying to shift to niche markets, including adventure travel and health and wellness tours.

Technology can also play an important role. With social distancing and health and hygiene protocols likely to remain in place for the foreseeable future, touchless service delivery and investments in digital technology could be a bridge to recovery.

Finally, should the reduction in travel be longer lasting, owing to changes in tourist preferences or economic scarring, some tourism-dependent countries may need to embark on a long and difficult journey to diversify their economies. Investing in non-tourism sectors is a long-term goal but could be aided by strengthening links between tourism and locally produced agriculture, manufacturing, and entertainment. In Jamaica, for instance, an online platform was launched that allows buyers in the hotel industry to directly purchase goods from local farmers. Exports, including services, could also be expanded, using regional agreements to address the constraints imposed by limited economies of scale.

### **Rebuilding Tourism Is a Priority, But the Sector Must Become More Sustainable and Resilient in The Future**

Tourism continues to be one of the sectors hardest hit by the coronavirus pandemic and the outlook remains highly uncertain. OECD expects international tourism to fall by around 80% in 2020. Destinations that rely heavily on international, business and events tourism are particularly struggling, with many coastal, regional and rural areas faring better than cities. Encouraging news on vaccines has boosted hopes for recovery but challenges remain, with the sector expected to remain in survival mode until well into 2021. Domestic tourism has restarted and is helping to mitigate the impact on jobs and businesses in some destinations. However, real recovery will only be possible when international tourism returns. This requires global co-operation and evidence-based solutions so travel restrictions can be safely lifted.

The survival of businesses throughout the tourism ecosystem is at risk without continued government support and although governments have taken impressive action to cushion the blow to tourism, to minimize job losses and to build recovery in 2021 and beyond, more needs to be done, and in a more coordinated way. Key policy priorities include:

- Restoring traveler confidence
- Supporting tourism businesses to adapt and survive
- Promoting domestic tourism and supporting safe return of international tourism
- Providing clear information to travelers and businesses, and limiting uncertainty (to the extent possible)
- Evolving response measures to maintain capacity in the sector and address gaps in supports
- Strengthening co-operation within and between countries
- Building more resilient, sustainable tourism

While flexible policy solutions are needed to enable the tourism economy to live alongside the virus in the short to medium term, it is important to look beyond this and take steps to learn from the crisis, which has revealed gaps in government and industry preparedness and response capacity. Co-ordinated action across governments at all levels and the private sector is essential.

The crisis is an opportunity to rethink tourism for the future. Tourism is at a crossroads and the measures put in place today will shape the tourism of tomorrow. Governments need to consider the longer-term implications of the crisis, while capitalizing on digitalization, supporting the low carbon transition, and promoting the structural transformation needed to build a stronger, more sustainable and resilient tourism economy.

### **Conclusion**

The tourism sector will be a very different in 2021 to what it was in 2019. The longer the crisis continues, the more businesses and jobs will be lost, the greater the implications for traveler behavior, and the tougher it will be to rebuild the tourism economy. This brings challenges for the sector, but also opportunities to encourage innovation, drive new business models, explore new niches/markets, open up new destinations, and move to more sustainable and resilient tourism development models.

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## **Preventing Violence against Female Transportation Workers to Increase Employment**

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### **Abstract**

Transport jobs can be well paid, rewarding and offer long-term career opportunities. Unfortunately, and unacceptably, few women are employed in these jobs and some positions fall below the standard of decent work. One of the barriers to a career in transport is workplace violence. Jobs in the transport sector are highly gendered and unequal, as is access to transport services. As a result, women's voices are all too often neglected when it comes to transport planning and the pursuit of decent work. Transport is still regarded as 'no place for women' in many countries/sectors around the world. Women in the transport sector often find themselves stuck in low(er) paid/low(er) status jobs with few, if any, opportunities for career development. Violence against transport workers is one of the most important factors limiting the attraction of transport jobs for women and breaking the retention of those who are employed in the transport sector. Violence can be defined as a form of negative behavior or action in the relations between two or more people. It is characterized by aggressiveness which is sometimes repeated and sometimes unexpected. It includes incidents where employees are abused, threatened, assaulted or subject to other offensive acts or a behavior in circumstances related to their work. violence manifests itself both in the form of physical and psychological violence. It ranges from physical attacks to verbal insults, bullying, mobbing, and harassment, including sexual and racial harassment.

### **Introduction**

External violence – workplace violence committed by external intruders who have no legitimate relationship with the workplace and who have undertaken criminal acts such as vandalism, robbery, sabotage or terrorism; Service-related violence—aggressive acts by customers or clients

of a service or a business; Internal violence—aggressive acts by current or former employees or other persons with an employment-based relationship with an organization (this includes workplace bullying and harassment); and Organizational violence – involves organizations placing their workers in dangerous or violent situations or allowing a climate of bullying or harassment thrive in the workplace .Gender-based violence not only causes pain and suffering to women but also devastates families, undermines work place productivity, diminishes national competitiveness, and stalls development. In the transport sector, workplace violence is widely acknowledged as one of the most important ‘push’ factors that lead to in voluntary quits and poor retention.

### **Problem of the study**

Workplace violence against women, more than any other form of sex discrimination in the work place, violates fundamental human rights. It is well established that certain occupations and individuals are more ‘at risk’ from violence at work. For example, workers who handle cash (e.g. taxi drivers), those who deal with frustrated customers (e.g. delayed passengers) or inebriated customers (e.g. passengers who drink alcohol on flights or rail journeys), and those who work alone, at night, or in geographically isolated places will all find themselves ‘at risk’. Predictable, preventable, and frequent, violence against transport workers is a growing problem.

### **The Career Cycle Method**

The Internal has developed a career cycle approach based on the common features of work in the transport sector and the issues that most concern transport workers, to facilitate further analysis of policy options to improve opportunities and mitigate barriers faced by women in the transport sector. The analysis focuses on the working conditions and human resource policies of transportation companies designed to main stream ender, the opportunities for success and advancement, the barriers to education and training faced by women, and the level of social support available to women who work in the transportation sector.

### **Violence in the Workplace**

Violence in the workplace Violence against women, more than any other form of workplace sex discrimination, violates fundamental human rights. It is well known that certain occupations and individuals are more ‘at risk ‘of work place violence. Workers who handle cash (e.g., taxi drivers), those who deal with frustrated customers (e.g., delayed passengers), those who deal within obviated customers (e.g., passengers who drink alcohol on flights or rail journeys), and those who work alone, at night, or in geographically isolated places are all 'at risk.' Violence against transportation workers is a growing problem that is predictable, preventable, and frequent.

### **Action Needed**

Employment in the transportation sector is highly gendered and unequal, as is access to transportation services. As a result, when it comes to transportation planning and the pursuit of decent work, women's voices are all too often ignored. Many countries/sectors around the world still regard transportation as a "no place for women. "Women in the transport sector often find themselves stuck in low(er) paid/low(er) status jobs with few, if any, opportunities for career development. Violence against transport workers is one of the most important factors limiting

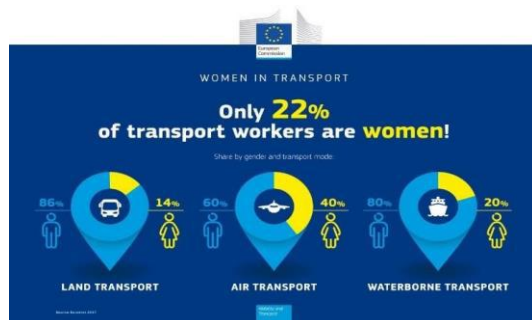
the attraction of transport jobs for women and breaking the retention of those who are employed in the transport sector

### **Work place violence has an impact on the career cycle.**

Workplace violence is a significant barrier to women obtaining jobs and advancing to successful careers. Figure1 depicts each stage of the career cycle, highlighting key factors that influence decision-making, experiences, and outcomes. These stages are interdependent and can reinforce each other in either a positive or negative way. Working around the cycle of initial attraction (stage I), for example, transportation jobs are unlikely to be 'advertised' to young girls at school as a potential career choice due to gender stereo types. As a result, women are less likely to pursue' Science Technology Engineering Mathematics subjects, 'limiting initial attraction, selection (stage II), and career advancement.

Figure 1

### **The Cause- Effect Relationship of Women's Retention in the Transportation Sector**



When there are few women in a particular transportation organization, or at least in specific technical roles, the organization is less likely to offer flexible working arrangements or (re)design equipment, tools, and personal protective equipment (stage I) to meet the needs of women. This, in turn, reinforces the disregard for interruption (stage II) and re-entry (stage III). Thus, there could be several barriers to women's retention, such as a lack of 'family friendly' HR policies, flexible working time arrangements, or career break policies.

### **Causing harm to people's lives and careers**

Gender-based violence not only causes pain and suffering for women, but it also destroys families, undermines workplace productivity, reduces national competitiveness and halts development.

Workplace violence is widely acknowledged as one of the most important 'push' factors leading to involuntary quits and poor retention in the transportation sector Figure 2 depicts the cause-effect' relationship (or' problem tree') depicting poor retention in the transportation sector.

**Figure2.**

Cause-Effect Relationship of Poor Retention of Women in the Transport Sector Many of the causes of low retention depicted in Figure2, such as poor working conditions, are 'gender-intensified' in the sense that they affect both sexes equally but disproportionately affect women (e.g.pro-longer periods at sea away from home or overnight stop over so on long road haulage



journeys, when drivers often sleep in their cabs, which can be more problematic for women with family or other caring responsibilities). While the devastating effects of violence against women are evidentially transportation sectors and countries around the world, the root causes and perpetrators will differ, necessitating sector- and country-specific policies to address this problem.

### **Suggestions**

- Develop practical responses at the workplace, enterprise, organization, sectoral, and national levels;
- Promote processes of dialogue, consultation, negotiation and all forms of cooperation among governments, employers, workers and their representatives, as well as other concerned stake holders as appropriate;
- Give guidance in developing national laws, policies and programs of action;
- Provide a basis for workplace, enterprise, organization and spectral agreements; and in work place policies and plans of action.

### **Conclusion**

The above study denotes the workplace safety and career development of women employees in transport sector. Many aspects is analyzed related to this problem. Various awareness programs will also conduct to grab the opportunities in transport sector. One in three women have experienced some kind of physical or sexual violence, according to the World Health Organization. To overcome this the employers have gone to great lengths to ensure that the employee arrives at work and returns home safely and comfortably. Companies should have well-defined policies and a dedicated team to handle employee transportation. Panic buttons installed in vehicles can be used to notify the transport desk In the event of an emergency. The creation of a career cycle model for women in the transport at ion industry has aided in the identification of appropriate policies to address the barriers that women face at each stage of the cycle.

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## **Consumers' Preference for Electric Two Wheelers – An Empirical Study**

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### **Abstract**

Electric two wheelers are becoming increasingly popular throughout the world, as more and more people look for efficient, affordable, and eco-friendly modes of transportation the sale for electric two wheelers is also increasing day by day. The present research was undertaken with the core objective to assess the consumers' preference for electric two wheelers. The study has been conducted among 100 respondents who prefer to buy electric two-wheeler in near future in Kangayam Town of Tirupur District, Tamil Nadu. The study is descriptive in nature and ensures convenience sampling method for data collection. A well-designed questionnaire is prepared and data have been collected through Google forms. The tools employed are chi-square analysis, correlation, linear regression and Henry Garrett's ranking technique. The result showed that there is a close relationship between monthly income and consumers' preference for electric two-wheelers. And the same time age and consumer's preference for electric two-wheeler is also 'highly significant'. The study concluded by recommending the manufactures to produce more trendy and stylish model electric two-wheelers at competitive price to attract new and young consumers.

### **Introduction**

The electric two-wheeler market in India is emerging on account of increased government policies supporting battery-powered vehicles, the growing awareness toward the environment, increasing petrol prices, and stringent emission norms. The Government of India has taken several initiatives to boost the sale of electric vehicles (EV). Electric two-wheelers, primarily comprising of scooters/mopeds and motorcycles, operate with the help of battery-based electric motors. These vehicles have gained popularity as an eco-friendly alternative to gasoline-powered vehicles owing to their zero carbon emissions. The global electric two-wheeler market is majorly driven by the growing environmental concerns towards increasing pollution levels from fuel-based automobiles. In addition to this, the high depletion rate of fossil fuels, such as diesel, petrol, etc., coupled with the rising fuel rates have also augmented the demand for electric vehicles. The growing consumer

awareness towards several economic and ecological benefits of electric vehicles has also catalyzed the market growth. The introduction of various government initiatives and awareness programs for curbing the rising CO<sub>2</sub> emission levels has provided strong growth opportunities to the market.

### Related Studies

Craig Morton et al.<sup>1</sup> explored consumers' preferences towards electric vehicles and found out that adoptive innovativeness and attitudes concerning the functional performance of EVs significantly affect preferences for plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (BEVs). Zhou et al.<sup>2</sup> investigated the factors affecting consumers' choice for electric motorcycles in Macau. The results indicate that 65% of respondents have purchase intention. Further empirical research analysis found that cognitive level, environmental consciousness, charge cost, license number, and income have significant positive effects on the purchase intention, while fuel price and family size have significant negative effects. Nguyen Gia Ninh<sup>3</sup> found that resistance to change has a significant impact on the purchase intention of EVs. In addition, perceived value has the most significant effects on willingness to pay and purchase intention of EVs. The need for uniqueness also impacts purchase intention through the willingness to pay. Goutham K et al.<sup>4</sup> concluded that electric bikes are more suitable for rural areas where the numbers of petrol bunks are not adequate, so that the rural people can charge the vehicle with the help of electricity. Sudarsan Jayasinghe et al.<sup>5</sup> explored that women are more inclined towards purchasing electric two-wheelers than men.

### Objective

- To study the consumers' preference for electric two wheelers.

### Research Methodology

The study is systematically and scientifically organized. The study describes consumer's preference for electric two wheelers and hence the nature of research is descriptive. For the present enquiry, population comprise of respondents who prefer to buy electric two wheelers in future in Kanga yam Town. The present study has made use of convenience sampling method to collect data from 100 respondents. In order to obtain primary data from the respondents structured questionnaire were prepared and data was collected using Google forms. Besides the primary data, the secondary data was collected from all associated sources such as books, journals and internet web sources. The collected data are analyzed by employing scientific tools such as chi-square analysis, correlation, linear regression and Henry Garrett ranking technique.

The Cranach's alpha examines the reliability of measures. Hence, the study undertakes reliability test for consumers' preference for electric two-wheelers and the resultant outcome is given in Table 1.

**Table 1 Reliability Test**

No.	Variable	Cronbach's Alpha ( $\alpha$ )
1	Consumers' Preference for Electric Two-wheelers	0.745

Source: computed



From the above table 1, it is clear that the study has good reliability as the value of Cronbach's is above 0.7 and hence the research can be taken for further research.

### Formulation of Hypotheses

H<sub>0</sub>: There is no significant relationship between age, monthly income and Consumers' Preference for Electric Two-wheelers.

H<sub>a</sub>: There is significant relationship between age, monthly income and Consumers' Preference for Electric Two-wheelers.

### Data Analysis and Discussion

**Table 2 Reasons for preferring Electric two-wheelers**

S.No.	Particulars	SA	A	N	DA	SDA
1	Eco-friendly	44 (44%)	43 (43%)	7 (7%)	1 (1%)	5 (5%)
2	Low fuel cost	39 (39%)	36 (36%)	15 (15%)	10 (10%)	0 (0%)
3	Environmental conscious	25 (25%)	20 (20%)	44 (44%)	9 (9%)	2 (2%)
4	Lightweight	21 (21%)	26 (26%)	17 (17%)	20 (20%)	16 (16%)
5	Low noise	27 (27%)	18 (18%)	13 (13%)	18 (18%)	24 (24%)

(SA-Strongly Agree, A-Agree, N-Neutral, DA-Disagree, SDA-Strongly Disagree)

Note: Number represents the frequency and number in bracket represents percentage

The above table 2 depicts that the majority 44% of the respondents strongly agree that the electric two-wheeler is eco-friendly, 39% of the respondents strongly agree that it is low fuel cost, 44% of the respondents were neutral for environmental conscious, 26% of the respondents agree that it is light weight and 27% of the respondents strongly agree that it produces low noise.

**Table 3 Monthly Income and Consumers' Preference for Electric Two-wheelers**

	Value	df	A symp. Sig. (2-sided)
Pearson Chi-Square	94.308 <sup>a</sup>	32	.000
Likelihood Ratio	98.862	32	.000
Linear-by-Linear Association	51.779	1	.000
N of Valid Cases	100		

Source: Computed

41 cells (91.1%) have expected count less than 5. The minimum expected count is .11.

From the table 3 it is noted that 'p' value is .000 hence it is 'highly significant' and reject null hypothesis at 1% level. It can be concluded that there is a close relationship between monthly income and consumers' preference for electric two-wheelers.

**Table 4 Monthly Income and Consumers' Preference for Electric Two-wheelers**

	Monthly Income	Consumers' Preference
Monthly Income Pearson Correlation	1	.018
Sig. (2-tailed)		.857
N	100	100
Consumers' Preference Pearson Correlation	.018	1
Sig. (2-tailed)	.857	
N	100	100

**Source: Computed**

From the table 4 it is inferred that correlation value is .018 it is inferred that there is positive relationship between monthly income and consumers' preference for electric two-wheelers. Hence, to conclude whenever monthly income increases consumers' preference for electric two-wheelers also increases and vice-versa.

**Table 5 Age and Consumers' Preference for Electric Two-wheelers**

Hypothesis	Regression Weights	Beta Co-efficient	R <sup>2</sup>	F	p-value	Hypothesis Supported
H <sub>1</sub>	Age → Consumers' preference for electric two-wheelers	.320	.100	10.856	.001	Yes

**Source: Computed**

From the table 5 it is observed that  $y = .320 + 1.423x$ . R square value of the linear equation indicates that 10% change in consumers' preference for electric two-wheelers can be accounted by age. Here the 'p' value is .001, which lies between 0.000 - 0.010 hence it is 'Highly significant' and reject the null hypothesis at 1% level.

**Table 6 Problems in Electric two-wheelers (Henry Garrett's ranking technique)**

S. No.	Factors	Weighted average scores	Rank
1.	Expensive	64.7	II
2.	Over charging battery issue	68.8	I
3.	Insurance problem	63.5	III

4.	Suitable only for short period	56.2	V
5.	Less storage spaces	56.5	IV
6.	High accident rate	50.5	VI

**Source: Computed**

It is evident from the above table 6 that, the respondents ranked over charging battery issue was the first problem faced in buying electric two wheeler with the highest mean score of 68.8, expensive was ranked second with the mean score of 64.7, insurance problem was ranked third with the mean score of 63.5, less storage spaces was ranked fourth with the mean score of 56.5, Suitable only for short distance was ranked fifth with the mean score of 56.2 and high accident rate was ranked sixth with theme an score of 50.5.

**Major Findings**

The major findings of the study are summarized below:

- It is inferred that there is a close relationship between monthly income and consumers' preference for electric two-wheelers.
- It is observed that whenever monthly income increases consumers' preference for electric two-wheelers also increases and vice-versa.

**Conclusion**

Batteries are being engineered to have along life. As the electric two wheelers become more widespread, battery recycling will become economically possible. Research in too their energy sources such as fuel cells and renewable fuels make the future look brighter for electric two-wheelers. Electric two – wheelers in particular have seen are solution in recent years.

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## **A Study on Satisfaction Level in Investment Pattern of Women Faculty in Self-financing Colleges at Coimbatore**

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### **Introduction of The Study**

Nowadays money play an important role in everyone life because without money nobody cannot sustain in this world. So, we earn the money by business, work self-employment etc. Everyone can earn money by their capability and enjoy their life in good manner. But peoples are earning the money enjoy anything in these how the peoples are knowledge in their investment plan. Because an investment is more gaining process of money in long period of time, minimum period of 5-10 years. In India compare to our country population more than 60% of the peoples belong from middle-class background their earnings between Rs.15000 to Rs.35000 averagely from this money that person have to run their family and facing other compliments like school/college fees of children raving expenses like petrol etc.

Savings and investment play a vital role in world economy without savings no one can made any financial operation in other word saving is a main component in financial decision that's why every company can make a surplus or general reserve amount from the profit to save the money to meet their future need and wants so the concept of saving is drop of water can make a lake of water. The major difficulty in investment is liquidity because the investor can make investment for long term if they have any financial emergency the liquidity of asset is difficult to covert the asset into cash or it may take some more time to exchange. So now the research is to study the satisfaction level of investment avenues of investor.

### **Objective of the study**

- To find out the investment avenue of investors
- To know the preference of investment
- To find the satisfaction level in investment avenue of investors

### **Review of Literature**

**Bhardwaj Rajesh, Raheja Rekha and Priyanka (2011)**, the researcher did a study to find the saving and investment pattern of school teachers both government and private school. The salary and pattern of saving is differing from both of them finally the research can find private school teachers are save their money for child education and marriage and government school teacher are save money for emergency purpose only

**Dr. Varsha Virani (2012)** In this study the low-income teacher is majorly focused on their future saving only they not aware about the inflation. the respondents are saving their money in maximum on bank deposit only and also invest for future need like children education and marriage

**Preeti Kulkarni (2012)** An article from Economic Times said that In India the young people who are age between 20 to 30 years old are very poor in financial awareness and planning the survey was done by HDFC and value notes. They don't have any knowledge about financial planning their goals also not related to financial events.

**Murithi Suriya, Narayanan and Arivazhagan (2012)**, in their study show that majority of female investor was dominated in investment market they have two or more source of information on investment. before they go to the investment to ask suggestion /idea from their family members and friends. It's clearly showing the female respondents are have knowledge about investment decision

### Problem of The Study

Earnings of money is easy but savings and investment of money is slight difficulty why I say this in our county we have N number of investment option like banking sector capital market money market insurance but the major problem is how to invest where to invest. Because the inflation rate is increase everyday due to some international issue but the saving amount rate of interest is still 4.5% to 6% only in baking sector so the researcher has to study the satisfaction level of investment of self-financing women faculties

### Research Methodology of the study

Research methodology is the systematic process of identify, analyses the collected information for the specific topics it includes research design types analysis sampling design etc.

The research is done through the primary and secondary data to find the result the ranking scale method is used in the study.

- Research Design : Cluster method
- Data collection Tool : Questionnaire Method
- Sampling Design : Random sampling
- Sampling Size : 75
- Source of data : Primary and secondary data

### Statistical tools

- Percentage analysis

### Data Interpretation

#### Age of The Respondents

S. No	Particulars	Frequency	Percentage
1	25 – 30 Years	10	13.33
2	31– 35 Years	24	32
3	36– 40Years	22	29.33
4	41-45 years	11	14.67
5	Above 46 Years	8	10.67
<b>Total</b>		<b>75</b>	<b>100</b>

Source of data is primary

### Interpretation

In the study the age factor of respondents are 13.33% of the respondent are 25-30 years old, 32% of the respondent are 31-35 years old, 29.33% of the respondent are 36-40 years old, 14.67% of the respondent are above 41-45 years old, 10.67% of respondents are above 46 years' old

### Income of the Respondents

S. No	Particulars	Frequency	Percentage
1	Rs.10,001 – 15,000	13	17.33
2	Rs.15,001-20,000	16	21.34
3	Rs.21,001-25,000	21	28
4	above Rs.25,000	25	33.33
<b>Total</b>		<b>75</b>	<b>100</b>

### Satisfaction level in investment of investors

S.no	Particulars	Rank (R)				
		R1	R2	R3	R4	R5
1	Gold	25 Respondents	35 Respondents	10 Respondents	5 Respondents	0 Respondents
2	Bank deposit (F.D & R. D)	25 Respondents	25 Respondents	20 Respondents	5 Respondents	0 Respondents
3	Post office deposit	10 Respondents	10 Respondents	20 Respondents	15 Respondents	20 Respondents
4	Government saving schemes	5 Respondents	5 Respondents	10 Respondents	30 Respondents	25 Respondents



<b>5</b>	<b>Insurance policies</b>	<b>20 Respondents</b>	<b>0 Respondents</b>	<b>15 Respondents</b>	<b>20 Respondents</b>	<b>30 Respondents</b>
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<b>S.no</b>	<b>Particulars</b>	<b>Total</b>	<b>Rank</b>
<b>1</b>	<b>Gold</b>	<b>305</b>	<b>1</b>
<b>2</b>	<b>Bank deposit (F.D&amp;R. D)</b>	<b>295</b>	<b>2</b>
<b>3</b>	<b>Post office deposit</b>	<b>200</b>	<b>3</b>
<b>4</b>	<b>Government saving schemes</b>	<b>160</b>	<b>5</b>
<b>5</b>	<b>Insurance policies</b>	<b>165</b>	<b>4</b>

**Source of data is primary**

### **Interpretation**

Gold got a 1<sup>st</sup> rank in the satisfaction level of investment avenue from the investors

### **Findings of the study**

1. Most of the respondents are getting an income above Rs. 25,000
2. 52% of respondents are prefer short term investment
3. Most of the respondents are spend above Rs 5000 for their savings
4. Bank savings and gold are the major saving source of the respondents
5. Most of the respondents says that gold have satisfy the investment avenues

### **Suggestions**

1. Know the government saving schemes it's give high return and safe to your money
2. If you have aware about mutual fund SIP you have invested your money in mutual fund
3. You have reserved the little bit of amount from your income it will help full in emergency time
4. To reduce the getting debt from other

### **Conclusion**

Saving is art of work the people will learn the art of saving it will easily make you a wealthy person in the society. First, we all can some goal to achieve but we don't know the path if we know the path, we achieve the goal easily the same concept is applied in the savings yes, we can save a small amount of money today which give the lump sum amount in future so first give a vision to your saving then easily make your wealth

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## **Assessment On Organizational Multilevel Performance Framework**

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### **Abstract**

Strategy (Re)formation and implementation pertain to collective responsibility of entire organization. This article proposes a normative framework for multilevel performance. This framework explores multilevel performance of organization through qualitative research. To fill the existing gap by presenting interconnectedness of multilevel performance bridge. By establishing the relationship between micro level and macro level performance mediated by intermediate performance will provide a good set of HRMP. It will allow us to understand the process of performance achievement from all level simultaneously. Hence, this article gives holistic insights on the understanding the process of achieving excellent overall level of organization performance.

### **Introduction**

Performance management is critical human resource management practice aimed to facilitate performance and development in organization by investigating single level phenomena e.g. (individual group/ team, organization, industry, country, geographic region). As the field of management advancement multilevel performance framework are used. For management to continue advancing as to explain the behavior of individuals, groups, and organizations, have a empirical investigations to encompass these multilevel effects. Multilevel framework is important for human resource management to analyze and interpret hierarchal data residing more than one level of analysis. Multilevel performance framework determines the standards are indeed being achieved on all level, it is necessary to apply holistic performance framework that allow for an assessment of the organization's progress from multilevel dimension. With this hindsight it is clear that the field of management began slow evolutionary change almost three decades ago. Usually, this work also addressed phenomena at level of group and organizational subunit but it was less prevalent and had no distinct label. Some articles made an effort to integrate theory or conduct research that crossed these levels of inquiry or analysis in effect, two or three lines of inquiry were progressing simultaneously as a consequence future. This performance management model involves multilevel of analysis and is clearly linked to the topic studied in strategic human resource



management as well as performance model with multilevel elements. This article determines the relationship between human resource practices and multilevel performance by analyzing past articles, identifies whether human resource management practice indicators are used at multilevel in those articles and indicates which level of performance will be more effective.

### **Review of Literature**

Human resource management practices as a source of value creation towards exceptional competitive advantage (Barney-1991), (Wirght-2001), (Speece 2014).

(Robert – 1978) which defends the need to conduct multidisciplinary model, highlighting the excessive specialization in the management field.

(House-1995) would emphasize the need to develop a ‘meso’ paradigm that simultaneous study of at least two level of analysis and their reciprocal relationship, indicating the need for this perspective and some basic concepts and principles of multilevel research Though there are bundle of articles successfully proven the relationship between human resource management practices and organization performance.

(Rousseau – 2000) multilevel research is a one way to promote the development of a more expansive management paradigm for understanding organizational system.

(Tsui & Gutek 2000) this special research forum on building bridges across levels was encourage, promote, and support high quality multilevel research. Developing an inter disciplinary science of organization, Roberts, Hulin and Rousseau (1978) called for integration of the different disciplines that studied organization. Similar revelation has emerged from empirical investigation aimed at explaining firm performance by examining industry level factors and action taken by firm

(Bou&Sattora 2007). Multilevel research might improve understanding of organizational performance that the performance effects of adopting a related diversification strategy are inconsistent

(Hoskisson – 1990). There was a little cross pollination across specialties. The boundaries and limitations of specialized viewpoint regarding complex organizational phenomena became increasingly evident

(Pfeffer-1993)There obviously a link between human resource management practices and performance of a organization this approach involves aligning human resource management practice in such a way that maximize current as well as future employee performance, which in turn is expected to affect organizational performance

(Boselie, Jansen –2001). Also, aligning practices directly involved in performance management also effects other practices and complicated cross level processes are involved in the proposed cycle. Organizational performance is on the organizational multi-level and human resource practices are set out the organizational level, although organizational may differentiate between groups

(DeNisi – 2000) notes that performance is both a multilevel and cross level phenomenon performance exists at different levels and although the model for performance at each of these

levels are not completely identical, they are similar, which suggest performance can be seen as a multilevel construct.

(Hoskisson, Hitt, Harrison – 2008) suggesting that industry structure and firm resource both plays important role in determining the appropriate strategies from firm that determines firm strategy in a multilevel. The relatively high amount of heterogeneity at the lower level finding significant lower-level effects

### **Methodology**

The analysis was conducted in two stages. In first stage is to identify related database by using keywords like Multilevel performance framework, human resource management practice, organizational performance from different sources such as Sage, Science direct, Google scholar, Emerald insights, Research gate, Hem journals, Tandfonline, Online library, Springer etc. The second stage was to filter the research articles by the keywords like multilevel performance framework, multilevel performance management. The analysis is focus on the identification of past research focus on performance evaluation satisfying the questions on.

- How many past articles discuss about the concept of multilevel performance and multilevel performance framework?
- How many past articles investigates the multilevel performance framework and performance management?
- Which level of performance level is more effective.

Analysis has been done on the basis of question on the above and the results will be discussed in the following section.

### **Findings and Discussion**

This section is about the result of article analysis based on multilevel performance framework outcome, Human resource management practice indicator, and performance outcome.

#### **Analysis**

On **90** articles, the discussion includes the multilevel performance framework indicators that been dependent or independent. The multilevel performance framework outcome classifies into 3 indicators multilevel performance, cross level performance and interconnectedness performance outcome. For Human resource management practice indicator classified as Enhancing practice, enhancing motivation, Enhancing empowerment. For performance level indicators are upper level, cross level, and lower-level effect of composition and multilevel nesting arrangement. The result as follows.

#### **Multilevel Performance Framework Outcome**

From the analysis done on 90 articles related to multilevel performance framework and human resource management practice, cross level framework and interconnectedness. There are 40 articles related to multilevel performance framework, 27 articles related to cross performance level framework and 23 articles are related to interconnectedness framework. Most of article indicates that good set of human resource management practice for framing proposed multilevel performance framework.

### **Human Resource Management Practice and Performance Indicator**

Most of the article's analysis chosen skill enhancing on influence factor of either multilevel, cross level or inter connectedness outcome. There are few researches on motivation and empowerment. There are still research used to be include all human resource management practices- (David 2003). Performance standards being achieved on all organizational level through multilevel framework with help of human resource management practice (K. Nonna-2000).

### **Performance Level Outcome**

Out of 90 articles, 40 articles are indicated that multilevel performance framework is more effective. 10 article state that cross level framework is effective and 5 articles were stated that interconnectedness framework will more effective than multilevel and cross level framework. It shows that multilevel performance framework leads to achieving effective organizational development and performance goal of employees at all level. Present multilevel performance framework will provide human resource management practice that will analyze organization performance and multilevel performance practice simultaneously. The relationship Human resource management practice and multilevel performance framework will favorable at all level. Relationship between multilevel, cross level framework and interconnectedness framework mediated by human resource management practice. From that we can enhance human resource management practice that will improve employee performance in all level where we can achieve better overall organization performance.

### **Conclusion**

This conceptual study was the result from analysis of past research in the field of multilevel performance, human resource management practice and performance. From the analysis performed it can be concluded that multilevel performance framework is way better than individual level framework because there is a improvement in overall employee development, performance goals and organization performance. It clearly shows that there is a demand in investigating more in the field of multilevel performance because there are quite few articles which have proper definition and explanation about multilevel performance. To fill up existing research gap future researcher need to adopt quantitative research method to acquire accurate result.

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### **Predictive model for dynamic Supply chain disruption risk Management**

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### Abstract

Escalating events around the world like pandemic, climate change and global geopolitical developments have increased the Need for Organizations to move towards supply chain resilience. This supply chain disruption facilitated recent shift from minimizing cost to minimizing delays, trade credit risks, order booking cancellations as well as the risk of economy sliding into recession. Vulnerabilities in supply chain disruption create ripple effects leading to more delays in the supply network. The motivation for our study is due to the significant impacts of the pandemic on supply chains, and proposes a predictive method to generate insights towards the supply chain disruption which will be useful for supply chain managers. The present research is proposed to develop a model framework that presents systematic approach to identify, analyse, infer and take appropriate actions to ensure supply chain resilience. The predictive model makes use of Particle Swarm Optimization algorithm to identify vulnerabilities among the supply chain network.

### Introduction

Competitiveness in global marketplace depends heavily on reducing lead-times and costs as well as increasing customer service levels. Organizations experience some degree of uncertainty, and some uncertainties can propagate risks to achieving the business objectives. The efficient management of these risks is critical to business success [ Sarmiento,2007]

The COVID-19 pandemic has resulted in unforeseen and unprecedented disruption propagation in supply chains through related networks. The COVID-19 pandemic has created significant uncertainty in supply and created simultaneous vulnerabilities in lead times and order quantities, disruptions in network structures, and high demand fluctuations. About 94% of the companies in the Fortune 1000 companies have reported coronavirus-driven supply chain disruptions (Fortune, 2020).

The outbreak of COVID-19 and the associated global pandemic has clearly shown the key role of supply chains pointing to the central role of resilience in the supply chains in this volatile world. The COVID-19 pandemic has resulted in the scope and scale of the observed ripple effect of disruption propagation cascading throughout a network adversely impacting the performance of individual firms and networks. According to Dolgui et al. (2020), the ripple effect refers to

structural dynamics and describes a downstream propagation of the downscaling in demand fulfilment in the supply chain as a result of a severe disruption.

Other specific issues include simultaneous disruption propagation and simultaneous severe disruptions in supply, demand, and logistics infrastructure including backlog accumulations over the disruption time (Ivanov, 2020a). There is necessity to develop models for disruption propagation due to pandemics in supply networks to visualize the ripple effect and their structural dynamics towards resilience and sustainability. Moreover, researchers can examine new analysis categories, such as network viability. It is also important to investigate data analytics and digital technology capabilities for early detection of disruption propagation (Ivanov and Dolgui, 2020; Ivanov, 2020a,b). Supply chain risk significantly impact on key fiscal metrics due to supply chain disruption. Supply chain risk assessment and mitigation are viewed as critical processes to address major supply chain risk. The supply chain should be monitored for the scale of disruption and alert mechanism should be smart enough for resilience



[David B Grant et al.,2017] Particle Swarm Optimization (PSO) is a stochastic optimization algorithm known for robust performance over a variety of combinatorial optimization problems. In accordance with PSO, the feasibility is ascertained for each individual in order to help it fly through a hyperspace towards optimality. The ability of the particles to remember the best position that they have detected is a major advantage of PSO. An evaluation function that is to be optimized evaluates the fitness values of all the particles to decide on the best course of action in an effort to reach optimality. [Joines J.A.,2008]

### Methodology

An organization may have many supply chain risk factors involved during execution of its business operations due to supply chain disruption. Delays in delivery and the corresponding fill rates play a vital role in this respect and it is imperative for the organization to minimize delays in fill rates. A simple supply chain model involving Supplier, Manufacturer, Distributor, Retailer and dealing with single product is assumed for illustration purpose. A database containing the Delays in delivery and the corresponding fill rates is created for each supply chain partner and for each period. PSO optimization methodology is designed to move towards dynamic supply chain risk analysis and management. The PSO methodology is outlined below. The individuals of the population, searching points and velocities are initialized randomly but within the lower and upper bounds of the values which needs to be specified in the algorithm. An evaluation function that is to be optimized evaluates the fitness values of all the particles. to choose the next best particle towards optimization. For every individual particle, a comparison is made between its evaluation value and its local best. The global best indicates the best evaluation value among the individual. This global best serves as an index that points to the best individual particle generated so far. This is done to diversify the search space as well as to intensify the search towards better feasible solution. This process continues till the evaluation function value is stabilized and the algorithm converges towards optimality.

### Implementation Results

The PSO is input with the database of delays and the corresponding fill rates among supply network for predicting emerging risk. As stated, the detailed information about delays (in days) and the corresponding fill rates values (in percentages) for the product for each period is captured in the database. The sample database containing this information is given in Table 1.

**Table 1:** A sample data of Delays and fill rate Scores

Supplier			Manufacturer		Distributor		Retailer	
PI	D1	F1	D2	F2	D3	F3	D4	F4
1	7	65	10	64	15	62	20	60
2	6	68	8	64	12	62	18	60
3	7	65	10	64	15	62	20	60
4	8	64	11	63	16	61	19	59
5	5	67	7	63	10	62	15	60

The PSO process is initialized with two random individuals and their corresponding velocities as given in Table 2.

**Table 2:** Initial random individuals

D1	F1	D2	F2	D3	F3	D4	F4
7	65	10	64	15	62	20	60
6	68	8	64	12	62	18	60

Similarly, Table 3 contains random velocities corresponding to each particle of the individual.

**Table 3:** Initial Random velocities

TRF1	TRF2	TRF 3	TRF 4	TRF 5
0.12987	0.1297	0.1297	0.1297	0.1297
0.0375	0.0375	0.0375	0.0375	0.0375

The simulation run on a huge database of past records showing evaluation function improvement at different levels of iteration is as follows:

**Simulation Result showing evaluation function improvement:**

Number of iterations	Evaluation function value
50	0.3685
100	0.4555
150	0.6545
200	0.7522

obtained  
convergence  
Table 4.

**Table 4:**

The final individual  
after satisfying the  
criteria is given in

Final emerging pattern

D1	F1	D2	F2	D3	F3	D4	F4
7	65	10	64	15	62	20	60

## Discussions

The emerging pattern of supply chain disruption in terms of Fill rates and Delay among supply chain partners is as follows:

D1	F1	D2	F2	D3	F3	D4	F4
7	65	10	64	15	62	20	60

The final individual thus obtained represents the most emerging pattern for the risk levels, providing essential information towards mitigation strategy. The inference from the final output is that the supplier delivers 65% fill rate with a delay of 7 days; The manufacturer delivers 64% fill rate with a delay of 10 days; The distributor delivers 62% fill rate with a delay of 15 days; The retailer delivers 60% fill rate with a delay of 20 days. The pattern suggests the effect of ripple effect among supply chain partners.

The primary purpose of risk identification and analysis is to initiate risk mitigation strategies. Mitigation aims at reduction of the chance that a risk event will occur and/or reduction of the impact of a risk event if it does occur. The organizations should discuss the importance of risk mitigation planning and describe approaches to reducing or mitigating supply chain risks. Remedial risk mitigation strategies like diversifying supply base, **holding** intermediate inventory or safety stock **and** taking advantage of process innovations and improvements are suggested to control the risk propagations so as to move towards supply chain resilience.

### Conclusions

To be sustainable, organizations need to accept risk as a key element of the business operations. Risk analysis gives an inference for suitable risk mitigation strategies to control anticipated risks for effective and efficient business management. Supply chain is being exposed to higher risk and the COVID-19 pandemic has resulted in fragility of Supply chains at an unforeseen scale and has created a global struggle. These supply chain disruption propagations through networks have affected every industry across every geography and companies have felt the corona virus supply chain impact in some way. To be sustainable, organizations need to accept risk as a key element of the business operations. Risk Factor Score plays a vital role in the in assessing the intensity of risk level and hence gives an inference for suitable risk mitigation strategies to control anticipated risks. The present research presents a model framework to identify analyses, infer and control towards supply chain resilience.

To tackle the complexity in predicting the emerging risk, a predictive approach based on Particle Swarm Optimization algorithm is proposed that is aimed at predicting the emerging risk among supply chain network in terms of Fill rate and associated delay time. Remedial risk mitigation strategies like diversifying supply base, **holding** intermediate inventory or safety stock **and** taking advantage of Process improvements are suggested to control the risk propagations so as to move towards sustainable supply chain resilience.

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## **A Conceptual Study on Policy Implementation on Tourism After Covid-19 Pandemic**

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### **Abstract**

The tourism economy has been heavily hit by the corona virus (COVID-19) pandemic, and measures introduced to contain its spread. Depending on the duration of the crisis, revised scenarios indicate that the potential shock could range between a 60-80% decline in the international tourism economy in 2020. Beyond immediate measures to support the tourism sector, countries are also shifting to develop recovery measures. These include considerations on lifting travel restrictions, restoring traveler confidence and rethinking the tourism sector for the future. The outlook for the tourism sector remains highly uncertain. The corona virus (COVID-19) pandemic continues to hit hard, with international tourism expected to decrease by around 80% in 2020. Domestic tourism is helping to soften the blow, at least partially, and governments have taken impressive immediate action to restore and re-activate the sector, while protecting jobs and businesses. Many countries are also now developing measures to build a more resilient tourism economy post COVID-19. These include preparing plans to support the sustainable recovery of tourism, promoting the digital transition and move to a greener tourism system, and rethinking tourism for the future.

### **Introduction**

The coronavirus (COVID-19) pandemic has triggered an unprecedented crisis in the tourism economy, given the immediate and immense shock to the sector. Revised OECD estimates on the COVID-19 impact point to 60% decline in international tourism in 2020. This could rise to 80% if recovery is delayed until December. International tourism within specific geographic-regions (e.g in the European Union) is expected to rebound first.

Domestic tourism, which accounts for around 75% of the tourism economy in OECD countries, is expected to recover more quickly. It offers the main chance for driving recovery, particularly in countries, regions and cities where the sector supports many jobs and businesses.

The impact of the crisis is being felt throughout the entire tourism ecosystem, and reopening and rebuilding destinations will require a joined-up approach. Tourism businesses and

workers are benefiting from economy-wide stimulus packages, with many governments also introducing tourism specific measures. Governments and industry are focusing their efforts on: Lifting travel restrictions and working with businesses to access liquidity supports, apply new health protocols for safe travel, and help to diversify their markets. Restoring traveler confidence and stimulating demand with new safe and clean labels for the sector, information apps for visitors and domestic tourism promotion campaigns. Preparing comprehensive tourism recovery plans, to rebuild destinations, encourage innovation and investment, and rethink the tourism sector.

**During Pandemic Preplanned Tour are Cancelled:** Change over the said period. The study also probed the likely recovery phases of the tourism sectors post the pandemic in order to understand how the sector would regain its pre-pandemic position.

Revised scenarios indicate that the implied shock could amount to a 60-80% decline in the international tourism economy<sup>1</sup> in 2020, depending on the duration of the crisis and the speed with which travel and tourism rebounds. Maintaining the baseline that tourism flows have remained severely restricted up to June, these estimates are based on the revision of two earlier scenarios for international tourism arrivals for the OECD area, supplemented by a third scenario which would see any meaningful recovery essentially delayed until 2021:

**Scenario 1 (revised):** International tourist arrivals start to recover in July, and strengthen progressively in the second half of the year, but at a slower rate than previously foreseen (-60%).

**Scenario 2 (revised):** International tourist arrivals start to recover in September, and then strengthen progressively in the final quarter of the year, but at a slower rate than previously foreseen (-75%).

**Scenario 3 (new):** International tourist arrivals start to recover in December, based on limited recovery in international tourism before the end of the year (-80%).

### Review of Literature

A review of the current literature on Covid-19's impact on the tourism industry reveals that the bulk of the texts that have been published thus far can be described as opinion papers or research notes. For example, the special issue of Tourism Geographies on the subject contains more than 30 works on the ways in which the pandemic events of 2020 could contribute to a transformation of the tourism industry. Additional works have also been published in other journals from the field of tourism (such as Annals of Tourism Research, Journal of Travel Research, and Journal of Sustainable Tourism) and other fields (such as economics). Only a few papers have been written using an empirical method (such as Yang et al., 2020; Gössling et al., 2020), and none have discussed an evidence-based policy for tourism in light of the Covid-19 crisis.

This research note sought to address various ways of rehabilitating the tourism sector through an examination of different national tourism plans. With the decline of Covid-19 in some regions, tourism slowly began picking up and hotels, tourist attractions, restaurants, and transportation started to resume activity. However, a second wave in some regions has caused tourism activity to decline once again. This note is an initial attempt to analyze national policies,

as they offer an evidence-based snapshot of a select sample of countries six months into the pandemic. A broader study including more countries, to be implemented after the recurring waves, has been planned in an effort to better understand national strategies. Continuation of this analysis, by gathering further data over the years to trace policy evolutions, will contribute to the current research on tourism development during and after the pandemic era.

### **National Policy on Tourism**

The much-delayed national policy on tourism will soon be finalized and it will have specific norms and provisions to suit the post Covid 19 traveler, a senior official in the ministry said on Monday. The draft National Policy on Tourism was prepared by the ministry and was under review after the pandemic eased, officials said.

"Just when we were ramping up the tourism policy, Covid 19 crisis came, bringing opportunities also".

"The pandemic is an evolving subject which has changed tourist trends. we are now again deliberating on how the policy is shaped in keeping with the global standards to be followed in the Covid-era. we have to digitize more to reduce physical touch, make places accessible for all'.

### **Methods**

Targeted as the social effect with the implementation of tourism promotion policy during the COVID-19 pandemic, this paper briefly analyses the impact of COVID-19 on the national cultural and tourism industry and selects several representative types of tourism policies, crawls the comment data of Weibo users, analyses users' perception and emotional preference to the policy, and thus mines the social effect of various policies. Subsequently, by identifying the social effects of various policies as dependent variables, a binary logistic regression model is constructed to obtain the best combination of tourism promotion policies and promote the rapid revitalization of the cultural and tourism industry.

### **The Government of Various Country Take Different Measure to Reble the Tourism Industry**

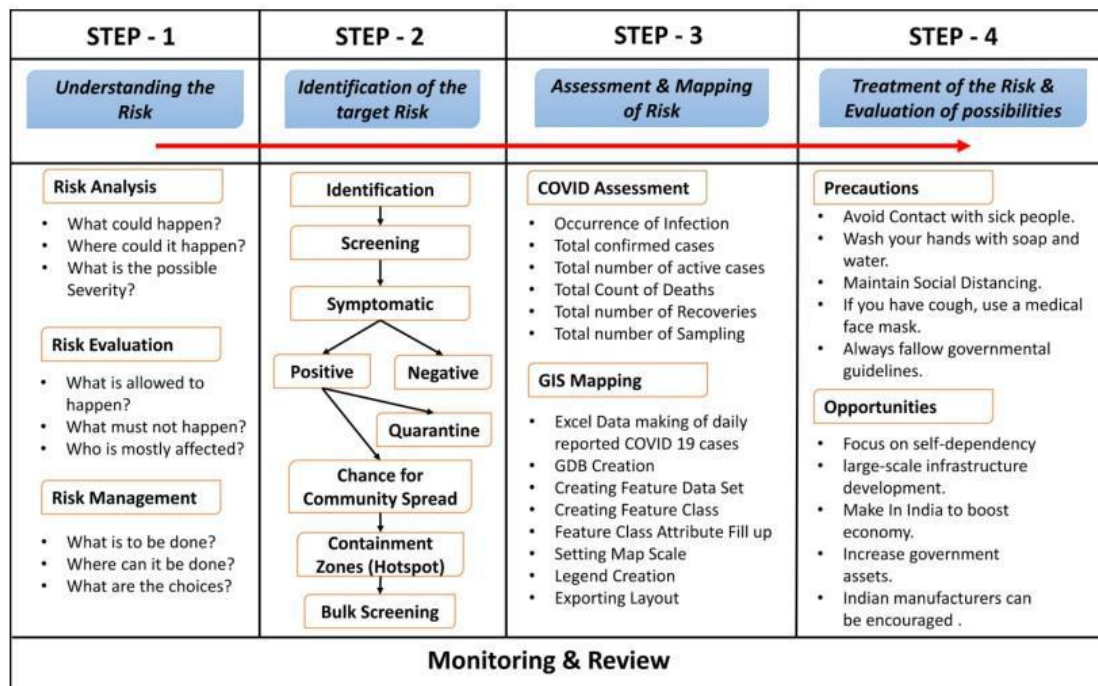
1. **AUSTRALIA:** In addition to the first AUS\$17.6 billion stimulus plan, announced in May 2020, the Government announced further measures and extensions bringing the total value of support to well over AUS\$300 billion.

2. **AUSTRIA:** The Federal Minister of Agriculture, Regions and Tourism, along with the Austrian Bank for Tourism Development has introduced a Coronavirus package for tourism.

3. **BRAZIL:** The analysis of the public policies suggests that these may have temporarily reduced the main negative impacts of the pandemic on the various segments that constitute the production chain of tourism, especially when it comes to the maintenance of jobs and income through emergency financial aid.

4. **FRANCE:** The France Government announced a plan of \$45 billion to support the economy, of which around \$35 billion are dedicated to the deferral of social and tax charge of companies. The self-employed were also considered in these measures.

### **Tourism Policy Response**



### Tourism Sectors

### Conclusion

First, it should be noted that the sampled countries, though different in many ways, have all yet to formalize comprehensive exit strategies and rehabilitation plans for their tourism sectors, and are, for the moment, implementing various tactical measures to contend with the current crisis as part of their national tourism policies.

Second, no single policy or strategy fits all, despite the UNTWO's recommendations, and each country has therefore adopted different dynamic plans. On the one hand, this is understandable, as each country has been impacted differently by the pandemic and has its own unique characteristics, as reflected in local politics, tourism networks and actors, society and culture

Third, the selective nature of the effects of Covid-19 and the measures to contain it may lead to reorientation of tourism in some cases, but in others will contribute to policies reflecting the selfish nationalism of some countries,” reflecting the weakness of the UNWTO recommendations.

Finally, “Like any policy intervention, their effect is likely to be highly contingent on local political and social contexts. These issues create substantial measurement difficulties when seeking to compare national responses in a systematic way.”

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## **The Internet of Things (Iot) Fueling The Development of Aviation Logistics And The Supply Chain Sector.**

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### **Abstract**

This paper aims to investigate the benefits of IoT opportunities in the aviation industry while also exploring what the industry can do to make full use of the IoT opportunities. The Internet of Things has impacted every industry but has made revolutionary changes in the aviation industry. The IoT can be summarized as 'opportunities for improvement'. Exchanging data over systems and devices, IoT paves the way for organizations to extract necessary data to make profitable and powerful business decisions and provide exciting new user experiences. It saves time and makes work easy. Introducing technologies such as AI and robots will aid in the faster development of this industry. The collaboration of these and more technologies with the internet of things will result in major transformations in the aviation industry. Going forward, these smart, holistically connect IoT systems that provide strategies and advantages in the aviation supply chain will be the new normal.

### **Introduction**

The term IoT, or Internet of Things, refers to the network of connected devices and technology that aid the communication between devices. In simple words, the term refers to the billions of devices worldwide that share data connected via the Internet. These include devices such as app-controlled lighting, activity trackers, and smart home security systems. The word 'Things' in the Internet of Things refers to devices embedded with sensors and software that communicate with other devices and systems. IoT has made it possible and easy for the physical world to meet the digital world. It offers numerous benefits to several organizations and people by simplifying their daily tasks.

### **IoT in Aviation**

IoT technologies are already making their way into the fleets of commercial airlines, where they are enhancing safety, efficiency, and intelligence. With the inclusion of the Internet of Things, the airline industry has now been able to deliver unique and better user experiences, simplified underlying processes, and most importantly enhance the productivity of the workforce. Adopting IoT can enhance aviation security and provide considerable benefits. Data

about passengers, vehicles, and flights can be used to improve the overall experience and reduce costs. It can also open the way for the development of an aviation system that can detect objects using computer vision, detect anomalies and provide warning to the cockpit crew.

The following are some of the implementations of IoT devices in the aviation industry in recent years.

**1. Better service:**

The use of the Internet of Things also enables the flight crew to wirelessly control the passenger cabin. This was done so that workers could control passenger safety, for instance, more successfully and respond to their requirements more quickly.

**2. Better passenger experience:**

The IoT has also contributed to the passenger experience. Passengers can now track information on the status of their travel in real-time. There has been an implementation of an internet network that allows travelers' mobile devices to view the information gathered by the airport and updated by the carriers. They can rapidly learn about arrival times, anticipated delays, and gate adjustments in this fashion. All of this is done to better serve and inform the traveler, increasing passenger.

**3. Precise Docking:**

Certain airports have recently installed sensors in the parking bay known as the A-VDGS. A-VDGS stands for Advanced Visual Docking Guidance System and helps aircraft to dock smoothly. The A-VDGS can offer data-sharing capabilities through interfaces to airport and airline information systems, which can be utilized to further optimize ramp operations in terms of capacity, traffic flow, safety, irregular operations, fuel consumption, and environmental performance.

**4. Controlled cabin temperature:**

Aircraft cabins are equipped with tools that enable them to monitor and adjust various cabin comfort settings. **With this** ability to monitor and control everything from temperature and humidity to lighting and **acoustics**, the cabin crew **can** maintain an optimal cabin environment for passengers.

### **Opportunities for IoT in Aviation**

There are a handful of exciting opportunities for applying IoT tech, here are a few examples:

**1. Effective maintenance:**

Making sure that the aircraft is performing at its best before take-off is vital. Hence, it can take a very long time. But unfortunately, all that time spent on the ground can result in considerable financial losses for airlines and cause stress to customers that have to sit through notoriously long waits.

Using IoT to track plane mechanical performance could speed up maintenance by streamlining and making it accessible for engineers. Data from the plane's smart

sensors would allow them to pinpoint exactly where they needed to concentrate their efforts, allowing for more efficient inspections.

2. **Smart sensors:**

The influence that sensors could have on aviation is enormous. Smart sensors in passenger cabins, for instance, might automatically control the temperature during the flight. This improves passenger comfort while saving flight staff time.

Smart sensors may also be employed to keep an eye on critical aircraft systems. Long before anything goes wrong, the data gathered might readily alert pilots and maintenance personnel to any problems or issues once the plane has landed.

3. **Smart maps:**

It might be difficult for passengers to find their way around an airport at times. This is partially a result of dense crowding in specific locations and the size of huge terminals. Airports are frequently blamed for making travelers feel overwhelmed, which is the main reason why navigating from terminal to terminal can be stressful and confusing.

4. **Flight logging:**

IoT devices can offer information about flight trajectories that can be utilized for post-flight analysis to find potential risks or hazards.

### **Implementation of AI and Robotics**

The extent of automation in the workplace has now increased significantly. This is the result of recent developments in robotics and AI. In the numerous fields where robots are utilized, these developments are expected to provide some new employment, but they may also eliminate some existing ones.

1. **Recommendation engines:**

One application of artificial intelligence in airports is recommendation engines. A customer's lifetime value and retention are increased by the AI platform's analysis of the passenger's historical data, including past reservations, behavior-tracking methods, metadata, purchase histories, and real-time data. This allows airlines to offer their customers relevant product recommendations in real-time.

2. **Chatbots:**

Bots can update flight information, lead consumers to certain services or outlets, and more, freeing up humans to focus on more worthwhile tasks and minimizing human contact.

### **Conclusion**

In conclusion, IoT is aimed to provide a high level of safety for aircraft and to improve customer experience by integrating human capabilities with artificial intelligence. Internet of Things is changing the world in areas related to logistics or automotive, and also in the aviation industry. All these changes are aimed not only at increasing profits, but also at optimizing processes and data collection, which is huge at the airports themselves.

Intelligent management of this information and using it to improve the efficiency of employees or facilities themselves are becoming crucial today.

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4. “How is the Internet of Things changing the aviation industry?” - Adam Macierzyński

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### Human Resource Interventions in Information Technology Industry In Bangalore

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#### Abstract

India is one of the fastest growing nations in terms of technology, and Government is also working on setting up more IT parks in major cities of our country. With growing IT infrastructure, and highly skilled and educated human resources, India has become the world technical savors' favorites country. India is growing with respect to two industries, namely Information Technology and Business Process Outsourcing (BPO). IT and ITES industry has contributed to India's GDP from 1.2 percent in 1998 to 7.7 percent in 2017.<sup>1</sup> Bangalore, is the major IT hub in India and larger part of IT exports are from Bangalore. Hyderabad is also known as the HITECH city or Cyber bad, is also one of the major IT hubs in India and also the largest bio-informatics hub in India.<sup>2</sup> Chennai is also a major IT hub of India, with lot of educated people, IT parks, and good infrastructure. Chennai, being the capital of Tamil Nadu, well educated people of this state would like to migrate to Chennai, to better opportunities, pay and better standard of living.

#### Introduction

The history of organizational development, shows abundance with the contributions from evolving scientists and experts, many of them, whom are well known, by means of the contributions of many people in the organizations. Methodical organization development activities have a recent antiquity. It can be viewed many experts have created plethora of interventions to help the organization fellows to address specific problems effectively. Certain human resource interventions such as team building, survey feedback, role analysis and intergroup conflict resolution were developed during the beginning years of organizational



development and certain Interventions such as quality of work life, work redesign using socio-technical systems theory, collateral organization and strategic planning methods were developed as the organizational development started to progress.

### **Human Resource Interventions in Information Technology Sector**

Human resource Interventions means an arrangement of planned activities, actions, and events by Human resource department, proposed to help an organization improve its performance and efficiency. Human resource Interventions are of three types; Individual based, for example, coaching, counselling, training, confidence boosting, mentoring, motivation etc. comes under individual based human resource Interventions. Next is group based human resource Interventions, example, conflict management, team building, etc. Last is Inter group-based Interventions, examples, organization mirroring, third party peace-making interventions etc. Some of the Human resource Intervention activities are goal setting, Performance appraisal, reward systems, career planning and development, coaching and counselling activities, Managing work force diversity and employee wellness.

### **Aim of the Study**

The aim of the study is to find out Human Resource Interventions in Information Technology in Bangalore. The liberalization policy and heavy competition has made the impression of Human Resource Management quite significant in Indian organizations. Be it a native concern or universal business houses, Indian management style puts quite a lot of prominence on the Human Resource Management function to acquire and retain best talents in the workplace. The strategic essence of Human Resources throws light on being an empowering tool to help management and employees achieve organizational objectives at a faster and a more coherent pace compared to earlier times. With the growing preference towards Human Resource interventions and with the rising need for active configuration of Human Resource strategies with business strategy, most Indian businesses are looking into developing transparency and emphasis in designing their Human Resource departments within their work structures.

### **Statement of the Problem**

Over the past few years, a vivid change has occurred in the labor market and demographic profiles of employees. While there is excitement for a bright future in IT industry, that is rapidly becoming reality, increasingly, questions and concerns are also part of it. Introduction of Robotic Process Automation and Artificial Intelligence, workload will now require one-tenth of the people power. Indian companies have to spend for re-skilling their workers, which would lead to fall in revenue per person. Depending only on a particular skill is not going to work out in this industry any more. One has to possess multiple skill sets to survive in this IT industry. Work Life balance is also one of the major challenges in the IT industry. Lot of studies has been done on work-life balance, work-life conflict, and family-life conflict in the IT industry.

**Pandu, Balu and Poorani (2013)**, studied 'Work life balance among IT and ITES professionals' covers Information Technology (IT) and Information Technology Enabled

Services (ITES) employees. The sampling size covers 121 professionals. The variables involved are work load and responsibility, work environment, Family dependents. The results indicate that there are dissimilarities in the perception related to the need for work life balance policies based on the employees' background. The employers should design and implement work life balance policies and practices keeping this factor in mind, which would enable them to utilize them utmost. This study suggests that the top authorities of the organizations should take this into consideration and set some coherent objectives for female employees.

A study was conducted by **Chandrasekar et.al (2013)** and an article was written by them named, "Study on work - life balance among the executives in IT industry with special reference to Techno Park, Trivandrum, Kerala" considering a sample size of 350 employees covering the Information Technology sector, Techno Park Kerala. The variables involved are Work related factors that interferes personal life, awareness and prevalence about work life balance programs, Level of risks Inherent in work life balance programs. The authors say, Work-life Balance is a subject matter of concern and pressing issue for discussion among researchers and scholars of the Information Technology world. The reason could be an indefensible one such as rate of attrition, job stress, and health issues. Information Technology industry is one of the highest contributors to the Indian GDP and major employment provider. The study confirms that a proper work-life balance will provide job satisfaction of employees which in turn will bring success to the organization and develop competing advantage for Information Technology organizations. Thus, the company's human resource team along with active aid with the employees should take initiatives to promote healthy work-life balance policies and make sure that the employees are benefited from such policies.

### **Objective of the Study**

Based on a thorough study of previous literatures related to the work and family conflict, work life balance and human resource interventions, the research gap has been identified and work family balance and human resource Interventions model was developed with the following objectives and hypotheses.

1. To identify the level of Human resource Interventions and work life balance prevailing among the respondents belonging to the various information technology sectors.
2. To offer suggestions, if needed.

### **Review of Literature**

**Lalit Prasad and PoojaKohli (2011)**, says 'Human resource Management: Work Life balance – a myth'. They have conducted a study on ten Information Technology companies. They have identified variables such as life balance, job satisfaction, burn out (stress, emotion, and de-motivation). The present study was conducted in only Information Technology companies; however, the research can be extended in the other type of organizations like sales related (FMCG, Insurance etc.) and manufacturing organizations. One of the limitations of the research is that the data is collected from the Information Technology companies situated at Hinjewadi IT Park Pune only. With the reference of this study, we can conclude that the proper work life balance increases job satisfaction whereas burnout dimensions like stress, emotion

and de-motivation decreases job satisfaction. so, work life balance becomes an inevitable element for the growth of the individual employee as well as the organization. so, the organization has to take due care of the work life balance of the employees.

**Prema Kumari Ponnambalam (2012)**, has studied 'HRM interventions to address work-life balance issues in private institutions of higher learning in Malaysia.' The author has covered the private institution of higher learning covering 400 samples. The main variables involved are Goal Setting, Performance appraisal, Reward system, Career planning and development, Coaching and counseling activities, managing work force diversity, Employee Wellness, the other variables found were Strategic role, communication role, Informal support, Line manager role in work life balance, effective work life balance policies, intrinsic job factors, human resource interventions, organizational climate and culture. The result of the study shows that work life balance is no longer considered in the Asian context, it has become a universal concern. Malaysia holds a significant position in the Asian region, as an industrial and educational hub, and this research will be seen to be relevant, not just for the knowledge creation process, but also for the practical relevance it holds within the lives of most of the Asian working population. The final Chapter in this journal summarized the conclusions pertaining to the four research propositions and the manner of relationships between these variables and the conclusions are arrived at, lead to new theory development. The recommendations based on the research findings were offered for consideration by the regulatory bodies as well as the human resource management functions within the PHEI within Malaysia. The limitations that emerged during the course of the research were acknowledged, which in turn has paved way for further research. This research is also become a self-discovery for the researcher, not just from the abundance of clear-cut knowledge that was available, but also from the insights acquired from the processes of coping up with the priorities, managing interactions with the respondents and disciplining one's mental processes to write with refinement and close-fistedness.

**M. Odeen, L.H. Magnussen, S. Mae land, L. Larun, H. R. Eriksen, and T. H. Tveito (2012)** have done a 'Systematic review of active workplace interventions to reduce sickness absence.' The authors says that the review finds limited or less evidence to say that active workplace interventions were not generally so effective in reducing sickness absence, but there was only less or moderate evidence of effect for the graded activity and limited or less evidence for the effectiveness of the Sherbrooke model and Cognitive Behavioral Theory (CBT). The variables found were, Cognitive workplace interventions, composite interventions, systematic review, workplace exercise, workplace physical activity.

**Chaudhuri and Basu (2011)**<sup>3</sup>, have studied 'Strategic Human Resource Interventions: Vision around the globe'. This study highlights, in this backdrop, the 21st century industrial economy today calls for a pro-active role on the part of the Indian Corporate Sector in bringing in globalization of business. The authors says that the organizations' search for competitive

advantage has come to rest in the people factor that draws attention to the message of achieving competitive advantage through people. The study makes an effort to bring to light a reflection of the identification of the strategic notion of the human resource function in some identified countries across the globe as contained in the management literature. The idea here is to understand the nature and perception of strategic human resource management practices, initiations and interventions across different cultures and national boundaries. The study states that, with liberalization and globalization on the cards and international competition in the air, human resource seems to be playing quite a strategic role in developing and harnessing firm performance towards business growth and development for Indian organizations. Hence there is a call for moving ahead towards the so-called strategic orientation of the human resource function with a step towards aligning human resource strategies with business policies, strategies and structures for achieving high performance work units with a higher return on assets, growth in sales and a well-balanced price-cost margin (Singh, 2003). the variables found were, strategic human resource management, Strategic human resource Interventions, human resource interventions.

### **Research Methodology**

The research objective for the current study includes exploration and description research methods. Exploratory research means, it enables the researcher to gain acumen into the research topic, then to clarify central concepts and construct and develop methods, which needs to be employed in the study. Descriptive research means, it allows the researcher to measure and report the occurrence with which the specific variable occurs in the sample, to present an image of the facts of a condition or relationship. The requisite of a good research strategy is, careful planning and a pilot study would often be a part of the strategy.

### **Analysis**

The present part of analysis measures the mean and standard deviation on the variables of human resource interventions. It has the following variables like goal setting, performance appraisal, reward and recognition, career planning and development, coaching and counselling activities, managing work force diversity and employee wellness. the human resource interventions is measured using mean and standard deviation. The analysis is as follows;

### **Statistics of Information Technology Sector in India**

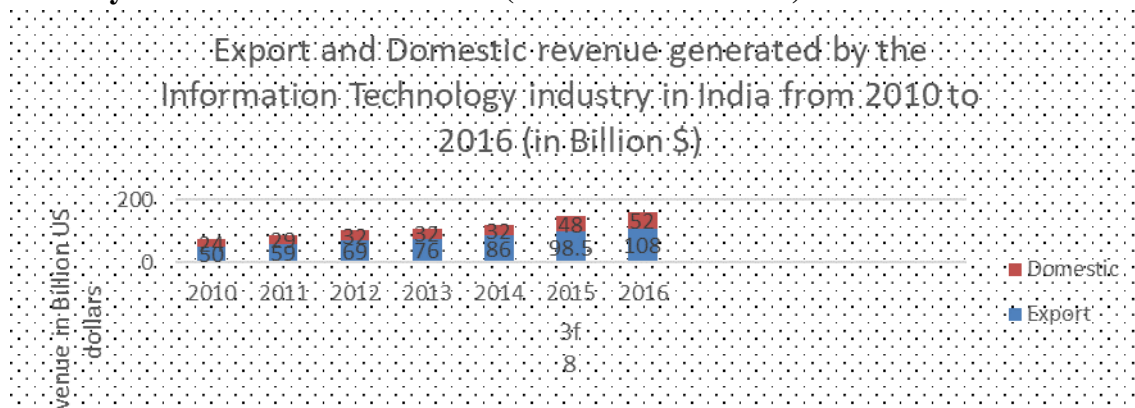
The statistics about Information technology in India has been taken from [www. Statistica.com](http://www.Statistica.com), a portal about statistical study about different industries from more than 22,500 resources.

### **Export and domestic revenue generated by the Information Technology industry in India from 2010 to 2016 (in billion US Dollars)**

Year	Export	Domestic
2010	50	24
2011	59	29
2012	69	32

2013	76	32
2014	86	32
2015	98.5	48
2016	108	52

**Chart showing Export and domestic revenue generated by the Information Technology industry in India from 2010 to 2016 (in billion US Dollars)**



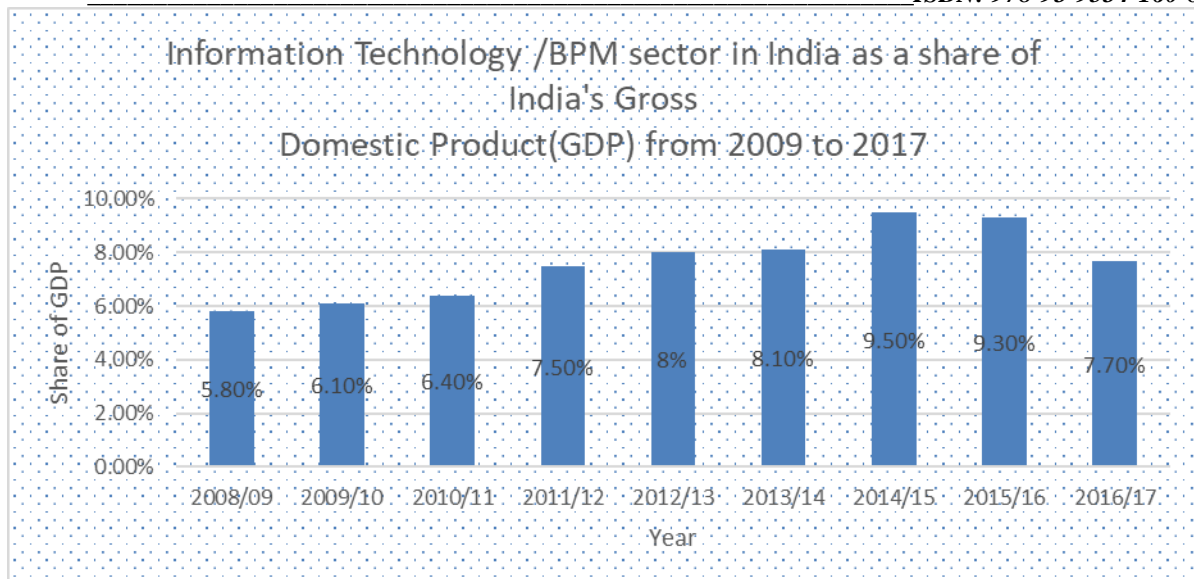
The above chart depicts the export and domestic revenue generated by the Information technology industry in India from 2010 to 2016 in US Billion dollars. In 2016, 98.5 billion US dollars and in 2015 98.5 billion US dollars revenue was generated by our Indian IT industry, while in 2010, it was only 50 billion US dollars, which is a drastic growth in very few years, which shows the growth of IT industry in India.

**Information Technology /Business Process Management (IT-BPM) sector in India as a share of India's Gross Domestic Product (GDP) from 2009 to 2017**

Year	GDP contribution
2008/09	5.80%
2009/10	6.10%
2010/11	6.40%
2011/12	7.50%
2012/13	8.00%
2013/14	8.10%
2014/15	9.50%
2015/16	9.30%
2016/17	7.70%

**Chart showing Information Technology /Business Process Management (IT-BPM) sector in India as a share of India's gross domestic product (GDP) from 2009 to 2017**





The chart shows the contribution of Information Technology / Business Process Management (BPM) industry towards India's overall GDP. It can be seen that IT/BPM sector has contributed 7.7 percent in the fiscal year 2016/17 and 9.3 percent in the fiscal year 2015/16.

### Conclusion

The IT industry, though there are many challenges, it continues to grow, in a rapid way. Nasscom – National Association of Software and Solutions Company, has projected a growth rate of 7-9 percent for the IT industry for 2018-19 as against 7.8 percent in 2017-18 and the IT exports would be at \$137 billion dollars in 2018-19 as against \$126 billion dollars in 2017-18. As per 'The Economic Times', IT industry is going to be a better industry in the coming years for India, as the US economy is doing well, the Indian IT companies can look forward for better year. Wipro has generated a revenue of nearly 80 million dollars in Intellectual properties, in 2016, and has set a target of about 150 million dollars. Tech Mahindra, with the establishment of 'Video Integration and Engineering', (VIE) platform, has said, it would aim to improve its strategic position with many video distribution companies in the US. Indian Institute of Technology (IIT) Delhi and IBM has entered into a multi-year research collaboration on Artificial Intelligence.<sup>4</sup> The researchers of IBM, along with the students and professors of IIT – Delhi, would conduct joint research in AI systems, focusing on some key traits like reasoning, comprehension and inference. This collaboration of corporate and students would enable the duo to develop Artificial Intelligence (AI), across the sector.

Bangalore, being the IT capital of India, the employees are expected to work long hours, given huge targets, timely closing of tickets etc. Though HR intervention policies, help to an extent to achieve work life balance, still there is a gap, and there is a need for more renowned, employee friendly policies. The policies, such as work from home, paternity leave, rewards and recognition, career growth, etc. are given for the employees, employee satisfaction is still

low and attrition rate is high. IT employees are expected to carry their laptops even during their holidays and work if any emergency situation. They are expected to attend calls, even during their holidays and during their family time, which leads to mental stress and pressure. They are unable to spend time fully with their loved ones. In this study, there is work conflict as well as family conflict. Work involving family conflict is more compared with family involving work conflict.

If the HR Intervention policies can be reviewed and more interactions held with their employees, conflict can be reduced to a great extent. Exit interview feedback can be collected in HRIS, so the employees may give honest feedback. Same way one-on-one discussions should be conducted with the employees, in HRIS, to get honest feedback. These feedbacks, would help to bring out more employee-friendly, policies, which would bring more employee satisfaction and improves productivity. A satisfied employee would be able to manage his personal and professional life in a better way, there by achieving work life balance. Role of HR department is very important in supporting the employees, in achieving work life balance. If there are proper systems and policies in place, life would become easier not only for the employees but also for the management in achieving the targets. However, a significant responsibility lies with the employees too in managing their personal and professional life. Proper planning in advance, between the work and family responsibilities, would help him/her a lot in avoiding work or family conflict and there by achieving work life balance.

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## A Study on the Effect of the Components of Logistics Management on Organization Performance with Special Reference to the Textile Manufacturing Plants Located in Tirupur, Tamil Nādu.

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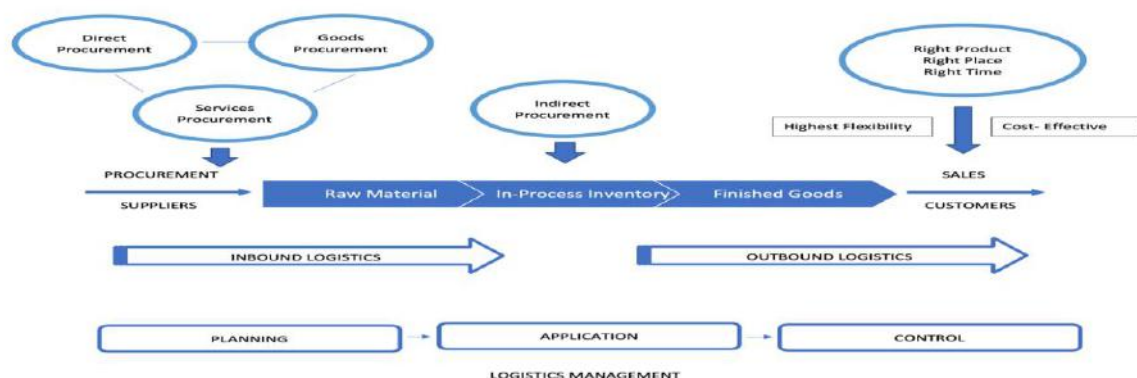
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### Abstract

The impact that globalization has had on businesses and the ways in which they conduct their operations has been significant. If businesses want to keep producing money in the present economic environment, they need to do all in their power to maintain a competitive advantage over their rivals. Logistics and supply chain management play an essential part in the business at every step it must pass through, which is necessary for the company's continued success and expansion. The sample for the research consists of fifty individuals, all of them are employed in various textile manufacturing units located in the Tirupur district of Tamil Nadu.

### Introduction

The term "logistics" refers to the overarching process of controlling the means through which resources are obtained, stored, and delivered to their ultimate location. The process of locating potential distributors and suppliers and analyzing how useful they are and how easy they are to reach is an essential part of logistics management. The growth of technology in the modern era, combined with the complexity of the processes involved in logistics, has resulted in the development of software for logistics management as well as firms that focus specifically on logistics and aim to speed up the movement of resources along the supply chain.



### Review of Literature

**KAMRAN AZEEM (2018)** In the study the researcher stated how a company gets cost and efficiency benefit. The project attempts to develop a logistical management paradigm. The study further revealed that effective logistic management doesn't need a massive organization, only cost-effective strategies to avoid material, time, and energy waste would benefit the need.

All companies must handle incoming and outgoing logistics. It also opiniated that designing and executing performance measurement criteria is an ongoing corporate activity and the performance management influences suppliers, product delivery, inventory costs, and customer satisfaction. The findings of the study also revealed that the logistical performance management affects customer delight and the logistics-savvy companies prosper.

### **Objectives**

- To gain insights into the logistics management of the textile manufacturing units.
- To study, understand and analyze the components of logistics management and its effect on the organizational performance.

### **Research Methodology**

The study makes use of a fundamental research method created specifically to aid in comprehending the role of logistics management in boosting business output.

### **Data Collection**

The research made use of both primary and secondary sources of information. The main data consists of information that was gathered by means of a well-structured questionnaire from respondents who work in either the medium or high-level positions at fifty distinct textile manufacturing plants located in the district of Tiruppur. The data gathered from secondary sources such as books, journals, magazines, and the internet are included in secondary data.

### **Data Analysis**

For the aim of doing an analysis on the data obtained via the use of a questionnaire, the EXCEL program was used. In order to conduct an analysis and make sense of the information that was acquired, statistical methods such as percentage analysis was used for easy and better understanding.

### **Limitations**

- Data collected form the respondents may be biased as it depends on various other factors such as the organization environment.
- The research is conducted and limited only to the textile manufacturing units in the district of Tirupur, Tamil Nadu.
- The research is restricted to the study and analysis of the components of logistics management and its effect in the textile manufacturing units.

### **Data Analysis**

**Table 1: Packaging Component**

<b>A Good Packaging is essential as it ensures</b>	
Vital Information to the Customers	40%
The products are protected	25%
Proper storage of the Goods	23%
Increase the Sales Figures	12%

**Table 2: Information System Component**

<b>Organization's Logistical Management Information System</b>	
Vehicle Tracking System	30%
Radio Frequency Identification Device/ Barcode	28%
Enterprise Resource Planning	27%
Electronic Data Interchange	15%

**Findings**

Consequently, it is clear that logistics management's constituent parts are crucial to the success of any given business.

- When asked about their company's inventory management practices, the vast majority of respondents opined that they check the inventory counts at least once each week.
- According to the respondents, quality packaging is crucial since it informs buyers of important product details and safeguards the item in transit.
- The majority of respondents believed that proper care and storage had the potential to lower storage costs and protect the longevity of the items in question.
- When an organization installs a vehicle monitoring system, it may learn a lot about its fleet's performance.

**Suggestions**

Effective Goal  
Setting and  
Preparation

Staff  
Education

Technology  
Adaptation

Inventory  
Management

Data Analytics

**Conclusion**

The process of logistics has become more complicated, and businesses now face the challenge of effectively managing their entire supply chains. The transfer of products from the producer to the distributor or the end-user is part of the logistics management process. It is much more than this and is an essential component of the supply chain, which is the network of interconnected processes that includes product sourcing, manufacture, fulfillment, and distribution. The management of logistics requires the establishment of a network of transportation that may include roads, air travel, rail travel, or ocean travel. Suppliers, agents, companies that offer freight forwarding services, distributors, packers, and service providers are also included in this business. Important aspects of logistics management include making

plans, controlling inventories, packing and handling materials, managing transportation, and gathering and analyzing information.

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### Delivering, “Gig Economy” To the Millennials

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### Abstract

The Post-Covid economy is volatile and unpredictable, driven by automation and artificial intelligence, with inventive inventions coming up in response to the pandemic. The economy is undeniably in jeopardy, but Covid has prepared the road for all new developing trends. Tina Brown, a former New Yorker editor, coined the term "Gig economy" in 2009. A gig economy is a form of free market where businesses frequently hire temporary employees for short-term contracts. Through digital platforms, the gig economy links independent contractors with clients to provide brief services or asset sharing. However, it prompts questions regarding worker and consumer rights. New fields of study including the platform economy and gig economy have emerged as a result of the digital revolution, sometimes known as the digitalization of the economy. Because millennial is more likely to absorb technology and adapt fast, the rise of technology has significantly influenced the gig economy. In the research,

potential changes brought on by a gig economy are hypothesized. Key words: gig economy, platform economics, millennials, digitalization.

### **Introduction**

The gig economy is the collection of markets that match providers to consumers on a gig (or job) basis in support of on-demand commerce. In the basic model, gig workers enter into formal agreements with on-demand companies (e.g., Uber, TaskRabbit) to provide services to the company's clients. Prospective clients request services through an Internet-based technological platform or smartphone application that allows them to search for providers or to specify jobs. Providers (i.e., gig workers) engaged by the on-demand company provide the requested service and are compensated for the jobs. Employment in the gig economy undermines the popular assumption related to human capital at work. The research results tentatively indicate that an employee with high or specialized skills is no longer the most desirable worker. A gig economy typically means micro tasking, i.e., work fragmentation into simple activities that can be easily codified.

### **The Rise of Digital Currencies**

Bitcoin and crypto currency are set to revolutionize the world of payment and employment. Cryptocurrencies are based on block chain technology, Blockchain is a digital technology that stores and records transactions across multiple. The upsurge of the gig economy has not gone undetected by the block chain ecosystem, and a number of block chain-based platforms that seek to depoliticize the freelance bidding process are now sprouting up. Cryptocurrency is a type of digital payment that can be exchanged for goods and services. Many businesses have created their own currencies, known as cryptos, that can be exchanged for the goods or services that the business provides. Users must first exchange real currency for cryptocurrency in order to gain access to the good or service the gig economy might very well fuel the upsurge of cryptocurrency, by allowing small businesses to work cross-border without the hassle of payment, not to mention the currency values that vary by country. One world, one currency may be a myth, but cryptocurrency is one of the major changes that a gig economy could bring about, and with millennials and Generation Z being tech savvy, a significant change could eventuate in the world of payment.

### **Economy For Startups**

Niche markets will revolutionize the market. The gig economy and gig market may pave the way for previously unexplored industries. leading to a new world for start-ups, while perfect competition could be dimension. Traditional business strategies may be antiquated, and new technology and innovation may shift the market, resulting in a plethora of potential innovators and fewer laggard. Organizations are being forced to reorganize their efforts as a result of the pandemic. Companies typically begin with cost reductions; businesses may choose to cut costs by spending less on marketing and gig economy. As a result, marketers have chosen to focus on new strategies such as customer retention.

### **Solubilization**



Solubilization, or the slowing of globalization, is thought to have begun during the 2008 global economic crisis and has lately gathered prominence. The covid 19 pandemic has significantly reduced international trade in goods, services, technology, capital and people, prompting columnists to declare the commencement of solubilization. The ability to exist and develop without depleting natural resources for the future is termed to as sustainability.

### **Changes In the Taxation Rates**

Taxation and tax reform can be critical to a country's economic success and advancement of country s progress. Tax policies are highly probable to play a critical role in the country's gradual economic recovery, post covid 19. Taxation entails everything the government does, and policymakers frequently use it to try to shape the economy. Future of taxation might be digitalization and automation, using technology, or artificial intelligence. Following Covid 19, economists agree with the outcome of a wealth tax.

The wealth tax is not the bait to cover the government's stimulus package provided during the pandemic. A more sustainable form of tax reform is required, one that does not suffocate the poor and does not place an undue burden on the wealthy, However, one of the most pressing issues that must be addressed is the clear indication that, as a result of the pandemic, many people in the vulnerable sector have lost their jobs, and developing economies must account for this, when imposing taxes.

And, as the gig economy becomes more prevalent, taxing policies will undergo significant changes. For a more established business owner—one who earns significant income, has an established book and record keeping system, and likely employs an accountant—the current business tax regime may be appropriate. But that regime is a mismatch for lower-income and potentially unsophisticated gig workers. Subjecting them to tax compliance rules aimed at traditional sole proprietors is not only burdensome but also likely leads to lower tax compliance, which in turn leads to less revenue for the government. It is also inefficient, as individuals spend hours of time navigating complex tax rules to report relatively low amounts of income.

### **Sustainable Development and Employment**

The most pressing issue we face is determining how we will achieve our sustainable goals by enabling the gig economy. The next question is whether we can promote the gig economy in order to create a more sustainable environment. And the solution could be a sustainable gig economy. The future may see enormous trends that promote sustainability at its best by utilizing cutting-edge technology and artificial intelligence.

### **Conclusion**

The gig economy offers flexibility and shorter working hours, despite economists' warnings that labor bargaining power and labor rights may be jeopardized, and there is an urgent need for government regulations and policies in the gig economy, While the gig economy will not last forever, the platform economy may be replaced by robotics and artificial intelligence. Economics is the study of human wants, but instead of prioritizing wants, humans should be prioritized.

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### **Mediating Role of Green Competitive Advantage on Organizational Effectiveness in Response to Green Hrm Practices in Smes**

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#### **Abstract**

Small scale enterprises (SMEs) play a significant part in growth and expansion of any nations. They deliver wide employment chances, industrial growth and promoting reasonable progress. Sustainable environment has turn out to be a chief issue today for the good quality of life of next generations. Various companies are adopting green manufacturing observes in their own organization. Green HR practices are another significant area focused by companies. In this HR professionals promote green recruitment, green selection and training, green orientation and compensation system. This paper made an attempt to analyses the perception of employees on green HR practices, and validating the facilitating role of green competitive advantage on organizational effectiveness in response to various green HR practices in small scale enterprises (SMEs) in India. The result of SEM reveals that intervention of green complete advantage made highest significant impact on employee engagement.

#### **Introduction**

The word green human resource practice has turn into a tactical word in the business world of the present scenario and its importance increases day by day. This word also has its own relevance as a digging area of current research, as cognizance of ecological management and long-term expansion has been increasing more and more around the domain. Today the green theme not only includes identification of ecological issues, but also represents the good quality of life of people in business and social perspectives.

Officialdoms usually coordinate HR practices into systems that are reliable with their business goals and tactics. Hence the ecological practices included in the human resource platform are part of social and business commitment of companies. Nowadays, officialdoms are realizing



and acknowledging green creativities into their strategy with the help of their employees. Key managerial persons ensure that their human resources use ecological human resource practices appropriately. In addition to this it is noted that, many writers have recommended that it is essential to encourage a large amount of conceptual and managerial skills of the employees in group to introduce a real green management methodology incorporates.

Companies around the globe are joining and employed to instrument green HRM activities to attain competitive advantage. The full acceptance and consolidation of green HRM in companies is practical, but it needs a new approach to convert existing human resource practices by both organization and employees concurrently. The major role of HR environmental executives should be to guide line managers for achieving workers cooperation for the implementation of green policies. This paper briefly focuses on some of the key green initiatives for human resources sections in SMEs sector and analyses the impact of such practices on organizational effectiveness and sustainable development.

### **Review of literature**

Gurudas Nulkar (2014) made a study on SMEs and ecological performance. The fallouts showed that such ecological practices are not creating burden for large companies. Such activities help to decrease waste, modify commercial results, and attain green benefit. SMEs should be focused on green strategic management approach to achieve their objectives. Companies should conduct programs for increasing awareness of management and owners.

Md.chapolali, KM anwarulislam, etal. (2020) studied green human reserve management and green originality for human resource professionals. The study is theoretical in nature and find out various green HRM strategies adopted by companies such as green human resource training and development, green learning, and green performance appraisal system. This study also explored various challenges faced by green human resource management.

### **Objectives of the study**

- To know the perception of HR professionals on green HRM practices in IT companies
- To explore major green HRM Practices in IT companies
- To measure the relationship of green HRM practices with organizational effectiveness and sustainable development
- To validating mediating effect of green complete advantage on organizational effectiveness in response to various green HRM practices in IT companies

### **Research methodology**

The study explored descriptive and empirical investigation designs. The researcher fixes a sample size of 280 HR professionals from 10 Small scale enterprises (SMEs) in Kerala. Simple random technique is executed for selecting samples from population. Independent sample t test, correlation, multiple regression and SEM were used for data analysis. All the tests are carried out with the help of SPSS and AMOS software's.

### **Analysis and interpretation**

#### ***Chi square test***

H<sub>01</sub>: There is no significant association between age of the respondents and adoption of green HRM practices.

**Table 1: Association between age and adoption of green human resource practices**

Age	Type of grievance reporting method	
	Chi- square	Significance.
	13.631	.010

*Source: primary data.*

Above table depicts the chi-square test result between age of the respondents and adoption of green human resource management dimensions. Results indicate that age and adoption of such practices has significant association with chi square value 13.631.

***Independent sample t test***

H<sub>02</sub>: There is no significant difference in the perception of HR professionals on awareness of green HRM practices.

**Table 2: Significant difference in the perception of HR professionals on awareness of green HRM practices**

Particulars	Label	t	Significance
Awareness of green HRM practices	Male	2.215	0.026
	Female		

Above table showed the perception of HR professionals on awareness of green HRM practices based on their gender. The probability parameter is 0.026, since the value is below acceptance limit. Hence the initial hypothesis is rejected and founds that a significant variation in the perception of HR professionals on awareness of green HRM practices based on gender. Correspondence analysis proves that male employees are more aware about green HRM practices.

***Exploratory factor analysis***

**Table 3: Green activities related with production and distribution**

Factor and Variance Explained	Components	Rotated Factor Loadings
Design	Company ensures that output is designed with the help of clean technologies	<b>.946</b>
	We ensure that our products contain recycled elements	<b>.923</b>
	Company modifies its products to reduce the environmental degradation	<b>.853</b>

Manufacturing	Green eco rating system is used in manufacturing process	<b>.847</b>
	Our company follows environmental norms and regulations related with manufacturing.	<b>.827</b>
	We ensure that Water consumption level is monitored in timely manner	<b>.646</b>
Distribution	We regularly monitor the fuel consumption in our company	<b>.850</b>
	We ensure that packing materials are reused in our company	<b>.825</b>
	We communicate the environmental impact to our customers in timely manner	<b>.762</b>
Discard	We adopt product recycling in our company	<b>.740</b>
	We reuse excess materials in next production batch	<b>.737</b>
	We discard unwanted materials without environmental degradation	<b>.634</b>

The above table shows the results of exploratory factor analysis. Four factors are extracted and named as design, manufacturing, distribution and discard.

#### ***Correlation analysis***

H<sub>03</sub>: There is no correlation exist between green human resource activities and effectiveness of the organization

**Table 4: Showing correlation between green human resource activities practices and effectiveness of the organization**

<b>Outcome variable</b>	<b>Predictor variable</b>	<b>Pearson's value</b>	<b>Probability value</b>
Organizational effectiveness	Green HR planning	.570	.000
	Green HR recruitment	.647	.000
	Green HR orientation	.559	.000
	Green HR training and development	.512	.000

Above table showed the results of correlation analysis between the dependent variable organizational effectiveness and predictor variables green HR planning, green HR recruitment, green HR orientation, and green HR training and development. Among the selected variables green HR recruitment has shown highest relationship with Pearson's value .647.

*Multiple regression analysis***Table 5: Significant role of green human resource activities on effectiveness of organization**

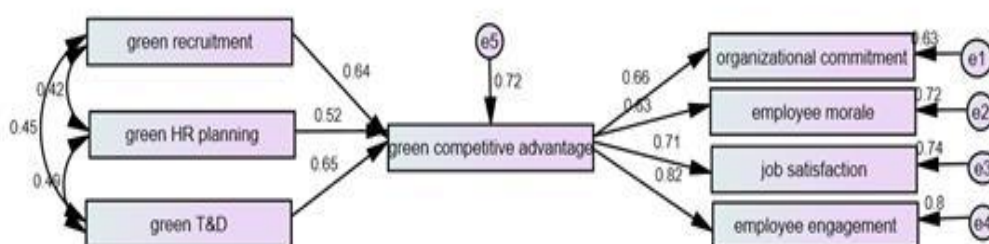
H<sub>04</sub>: There is no significant role of green human resource activities on effectiveness of the organization

Measurement	R square value	Adjusted R square value
Role of green HRM practices on organizational effectiveness	0.803	0.813
<b>Predictors:</b> green HR planning, green HR recruitment, green HR orientation, and green HR training and development		
<b>Dependent variable:</b> organizational effectiveness		

This table depicts the role of green human resource activities on organizational effectiveness. The R-Square value shows such activities made 80.3% impact on organizational effectiveness.

***Mediating effect of green competitive advantage on organizational effectiveness in response to green HRM practices***

H<sub>05</sub>: Green competitive advantage has no mediating effect on organizational effectiveness in response to green HRM strategies

**Figure 1: SEM for the facilitating role of green competitive advantage on organizational effectiveness in response to green HRM practices****Findings, suggestions and conclusion**

- Chi square test revealed that age and adoption of green HRM practices has association with chi square value 13.321.
- Results of t test found a variation in the perception of HR professionals on awareness of green HRM practices based on gender. Correspondence analysis proves that male employees are more aware about green HRM practices.

- Results of factor analysis identified major green actions in their production and distribution, further named as design, manufacturing, distribution and discard.
- Correlation analysis concludes that high relationship exists between green human resource practices and organizational effectiveness. Green HR recruitment has shown highest positive relation with correlation value .647.
- Regression analysis proved that green HR practices made a significant 80.3% impact on organizational effectiveness.
- SEM validating that, green competitive advantage made strong mediation on organizational commitment in response to various green HRM practices (0.631 percent).
- It also proves that facilitating role of green competitive advantage on employee morale with 0.720 percent effect.
- Results of SEM identified that implementation of green competitive advantage made strong impact on job satisfaction (0.742 percent).
- SEM also revealed that introduction of green competitive advantage leads 0.802 percent effect on employee engagement.
- Government should map SME clusters for specific interventions.
- Companies should invest in research projects for designing green manufacturing technologies.
- Policy makers should clearly understand about green activities from production to distribution. Policies should be implemented on the basis of such activities.
- Companies should promote green logistics and green supply chain Management.
- Management should create awareness on green performance appraisal, green career advancement and employee relations.

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## **A Study of The Employee's Perspective in Talent Acquisition Process**

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### **Abstract**

Job Recruitment always address the several needs of the Company. The right Manpower planning Strategy will significantly affect the long-term goals that company pursues, and it also acknowledges the talent in organization who can play a vital role in companies' success. It's no more going to just filling seats. It takes a strategic approach to efficiently build the talent for the ongoing process which helps to identify the appropriate talents for C Suite, executive and leadership level positions in an organization. The right way of building talent acquisition or recruitment strategies involves lot of analysis which can boost the employer brand, get nice skills on board and talent in the market, build a strong succession plan to offer interim / trail runs for the talents inside. In the last year 2021, lot of companies have adopted virtual model of recruiting, shifted talent attraction, started considering internal pool, shifted the focus on diversity, equity, and inclusion. Recruiting is the face of the organization, and it can be affected by lot of factors and parameters such as candidate satisfaction, employee satisfaction, Employer branding, talent availability, Compensation and benefits, values of the organization. This study identifies the important aspects of the talent satisfaction level, different sources of recruitment, opinion on the sources of hiring in practices, various factors that affects the talent acquisition, and the overall satisfaction level of an employee of recruitment methods in IT Companies in Chennai region.

### **Introduction**

In existing trend, there is a big competition in all the sector and industries. There is a huge expectation to sustain or increase the organization effectiveness and the efficiency, in which Human Resources Department and the key player Talent acquisition plays a vital role in achieving the goal successfully. The supply and talent of the organization has import role to decide the success factor of any company. Talent acquisition involves various steps such as Profile sourcing, generating leads, Interviewing, and assessing the job candidates, reference checking, preparing for the final shortlists/ selections, finally onboarding a candidate. Without the right talent in place, the organization cannot achieve the required or optimum level of the HR performance.

The organizations are coming up lot of advanced ways such as setting up recruiting goals, investing on lot of recruiting tools such as Job boards (Indeed Job Search, Glassdoor Jobs, LinkedIn, Monster, Naukri, ZipRecruiter, Simply Hired, CareerBuilder), Chatbots, Interviewing software (Recruiter.com Video, Modern Hire, Interview stream, Spark Hire, Jobvite, My Interview, Breezy, VidCruiter, Imocha, Hire Vue), Applicant tracking systems (BambooHR, Bullhorn, Greenhouse, IBM Kenexa BrassRing, iCIMS, Jobvite, Oracle Taleo & Smart Recruiters), CRMs, Mobile application to participate in the peak and troughs in the



HR Manpower planning. Companies are making lot of efforts to hire the talents such as created an HR focused culture, moving out of the office and meeting different people, connecting & engaging them and they also emphasize not only on recruiting, but also on retaining such as providing work from options, bring competitive compensation packages, Reassessing the salary packages, Creating the Pathways for Growth, Improving the Organizational Culture & also supporting employee wellbeing.

Edwin B. Flippo says "It is a process of searching for prospective employees and stimulating and encouraging them to apply for jobs in an organization."

For long, Chennai is considered one of the technology services capitals of India. It has large companies like CTS, TCS, Syntel, Oracle & Wipro. It has homogenous tech ecosystem of various IT and service companies with lot of technology talent. it's also considered among the top destinations for Tech and software professionals. Lot of IT companies have set up their base and operations team in the southern India. Resultantly, lot of job opportunities galore with lakhs of people in Chennai.

### **Review of Literature**

Rao Pramila in 2010 has made a comprehensive study and investigation on the Upper/ leadership management level recruiting methods and process. She identified personality tests, employer references, internal recruitment, newspaper recruitment were the predominant level of the recruiting practices followed.

Djabatey E. N. (2012) investigated the efficacy of the Hiring and Talent selection practices of HDFC. She concludes that Recruitment & selection of the talents to a large extent determines the performance of the company. It is also recommended that The Human Resources Department should be constantly appraising the employee's performance to retain them, and refresher courses can also be organized considering the trends in the market.

Nair Aishwarya in 2011 has investigated the efficiency of the Hiring procedure followed in HCL and it's found that the employees had a good impact towards the recruitment process happening at HCL.

### **Objectives of Study**

- To find the different Talent acquisition sourcing practices in Information Technology companies
- To determine the several factors influencing the hiring practices in the Information Technology companies
- To identify the employee satisfaction of the Talent acquisition practices in Information Technology companies

### **Data Collection**

The entire study was conducted using the primary data.

The Data has been acquired from 100 Software Employees of the Information Technology organizations by providing closed ended type of questionnaire. The same was collected from the available literature.

### Data Analysis

**Table 1: Source of Hire**

Sl No	Sources	% Of respondents
<b>1</b>	<b>Campus Recruitment</b>	<b>25</b>
2	Employee Referrals	13
<b>3</b>	<b>Job Portals</b>	<b>17</b>
4	Social Media	4
<b>5</b>	<b>LinkedIn / Professional tools</b>	<b>13</b>
6	Head Hunting	8
<b>7</b>	<b>Placement agencies</b>	<b>15</b>
8	Internal Job movement	1
<b>9</b>	<b>Others</b>	<b>4</b>

The table 1 specifies that, campus recruitment and job portals are the mainly used source of hire and the placement agencies are the next mode of source for recruitment. However, the other methods are widely used for sourcing by internal job movement is the last mode of sourcing.

**Table 2: Opinion on effective source of hire**

<b>8</b>	<b>Internal Job movement</b>	<b>2.68</b>
1	Campus Recruitment	4.51

The table 2 results show that, Campus Recruitment and LinkedIn are the highest effective methods for sourcing and the other methods are moderately effective methods of hiring in IT sector. Internal Job movement looks ineffective method of hiring

**Table 3: Internal factors affecting Hire**

Sl. No	Sources	% Of respondents
1	Salary package	4.20
<b>2</b>	<b>Work life balance</b>	<b>4.29</b>
3	Culture of the organization	4.12
<b>4</b>	<b>Carrer opportunities</b>	<b>4.21</b>
5	Remote work options	4.04

<b>6</b>	<b>Insurance</b>	<b>4.06</b>
7	Onsite opportunities	3.88
<b>8</b>	<b>Leave policies</b>	<b>3.47</b>
9	Face of the Leadership team	4.04
<b>10</b>	<b>Others</b>	<b>3.44</b>

The table 3 shows that work life balance and salary package are the top factors that affects the internal hiring and Onsite, other factors are least affecting the hire.

**Table 4: External factors affecting Hire**

Sl. No	Sources	% Of respondents
1	Un employment rate	3.76
<b>2</b>	<b>Supply and demand</b>	<b>3.93</b>
3	Employer brand	3.89
<b>4</b>	<b>Competitors</b>	<b>3.59</b>

The table 4 shows that the supply and demand are the top factors that affects the external hire, whereas competitors do not bring significant affect over the recruiting process.

**Table 5: Overall satisfaction level of the Respondents**

Sl. No	Sources	% Respondents
1	Highly Satisfied	55
<b>2</b>	<b>Satisfied</b>	<b>33</b>
3	Neutral	7
<b>4</b>	<b>Unsatisfied</b>	<b>5</b>
5	Highly Unsatisfied	0
	<b>Weighted Mean</b>	<b>4.38</b>

The table 5 displays maximum of the respondents, i.e., 55 respondents are highly satisfied with the recruiting process, 7 % pf them are neither satisfied nor Unsatisfied, only 5 % of them are Unsatisfied and no one of them are Highly Unsatisfied

### Findings

1. It is observed that, campus recruitment and job portals are the mainly used source of hire and the placement agencies are the next mode of source for recruitment, the other were also leveraged for recruitment but in a very small number. The study also explored that internal job movement is not practiced popularly

2. Respondents also felt that Campus recruitment and LinkedIn are the most effective way of sourcing.
3. Most of the respondents were satisfied with the recruitment practices that are currently been followed. It indicates that IT Companies in Chennai are following the expected way of hiring practices by the employees.

### **Conclusion**

The articles help the Talent acquisition professionals to look at the various ways of sources, different internal and external factors that influence recruitment. The company can increase lot of scope for campus recruitment initiatives such as conducting campus hiring at suitable campuses for companies through campus intelligence. Improve lot of brand visibility of the campus through pre-placement talks, conduct lot of campus to corporate events, seminars, webinars, guest lectures, bring lot of employers branding initiatives, Developing lot of Early Career and Internship Programs.

Also, the next important focus area is LinkedIn as it's a hiring and social platform which has been designed specifically for the business community. Talent acquisition professional can leverage LinkedIn as it accesses to 88-million India members & candidates gain social proof for all their skills and talents & wait for passive opportunity and it can be used for all Strategy, Leadership and Passive hiring.

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### **Entity of Logistics service Providers into the Herbal industry**

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#### **Abstract**

The purpose of this paper is to check the Herbal industry supply chain organization from a social network approach, with a stress on the role of logistics service providers (LSP) could hold within the flow monitoring. We try and understand if LSP is a substitute to traditional actors for intermediation management. This substitution phenomenon must see of the Herbal industry culture which will constitute an obstruction or an accelerator for the event of this activity. We present a conceptual model, and that we discuss the possible future role of the LSP. This paper introduces a framework contributing to know worldwide herbal supply chain organization, mapping tools and methods to assess the explanations of their evolution. The cultural impact is underlined during this sort of industry showing it could present a boundary to plug access for LSP. This paper also highlights an exploration program contributing to a more robust understanding of the herbal supply chain, mapping tools and knowledge to assess the explanations for his or her strength or weakness. We specifically offer insights into the pre-requisite conditions for an intensive analysis of performance criteria and possible improvements within the herbal supply chain because of the provision of LSP.

#### **Introduction**

To understand the complexity of international Herbal trade, several approaches are possible: for instance, a geographical approach (regarding the evolution of production and consumption areas directly associated with export flows), or an economic approach (since the 1960s, the assembly is increasing and its structure has changed with the emergence of latest markets). The stakes are more, given the profits generated by this industry. Mariani et al.[1] explore the changes that occurred within the geography of international trade. The aggregated Herbal import flows were divided into five groups of states consistent with their role within the international market: major importers (Germany, the United Kingdom and USA, the three countries which have long been the most export destinations for Herbal), small traditional importers (12 countries), small non-traditional importers (56 countries), major Mediterranean exporting countries (France, Greece, Italy, Spain, Portugal), and other exporters (New-Zealand, Australia, Argentina, Chile, South Africa). Mediterranean exporting countries have missed their market share in favor of other exporting countries that have increased their market share. This is often partly thanks to the preferences of the many consumers for imported Herbs yet as on the transfer of production from small units to multinational groups. Thus, the international distribution network has changed to suit to the new international structure of demand. A recent

phenomenon has emerged: intermediation. Intermediation has developed in countries aside from the buyer and producer ones (e.g., Singapore for example). Henceforth, the normal competitive relationships among intermediaries and vertical relationships within the supply chain are changed. Today, the number of intermediaries has increased, be it market-makers or match-makers. Mariani et al. show clearly the phenomenon of re-export through intermediaries, as following: “by combining statistics on Herbal production and exports it's possible to spot some exporting countries without domestic production or with a production below their exports. By filtering Herbal exporters within the way, a group of 33 re-exporting countries was identified”.

Beside these geographical or economic approaches, more territorial and managerial approaches specialize in the performance of the Herbal industry supply chain. It became a crucial issue for several parts of both the old and new world. Indeed, the international Herbal trade is predicated on a posh industry insofar because the Herbal is produced in keeping with specific quality standards (in different regions) and, for being exported requires specific conditions. Thus, mapping the herbal supply chain may be a complex exercise. in keeping with Garcia , the dynamics of herbal supply chain, “is very complex not only because of quantity of actors who participates to meet the customer’s requirement, but also because the availability chain integration, which is different in step with the culture, agricultural and industrial practices of every country”. As any extended logistic chain, it requires “a synchronization of all activities” , the data sharing through cooperation within the ultimate aim of making value for all actors. Appreciating the timing and every one physical and data flows of the herbal supply chain requires a modeling of flow, relationships, links and actors: “in order to know the herbal supply chain it's necessary to count with a model that represents its operations, its relationships and its dynamics” . We propose to model the heterogeneous actor’s network of herbal supply chain. So to understand the structure of the herbal supply chain, three different levels are considered: the triads, the groups and also the complete network (part 3). Then, we examine the capacity of the standard LSP to penetrate the herbal supply chain by observing the cultural barriers to beat (part 4). Eventually, we conclude on the importance of three thematic about LSP (part 5).

### **Literature Review**

The model presents the complex reality of the provision chain. To approach this complexity, Cooper et al. [14] and Lambert et al. [15] seek to capture both the complexity and reality by proposing a modelling of supply chain network with three structures: the type of supply chain partnership (primary and secondary partners), the structural dimensions of a supply chain network (horizontal and vertical structure), and also the characteristics of process links among supply chain partners (managed process links, monitored process links, not managed process, and non-member process links). Garcia [4] and Garcia et al. [16] propose to use a modelling language or network presentation to form “a generic model of the supply chain which represents all the possible instances”. during this manner, some authors have focused on the interests of a representation of the supply chain by the social network analysis



(SNA) [17–23]. The majority of these authors explain why theories from social networks are particularly relevant. They present the key elements that frame a network, indicators and usable analysis: nodes level (degree, closeness centrality and betweenness centrality) and network level (density, centrality, complexity). However, few of them transcend in mapping a supply chain because they have recognized the matter of collecting network-level data in supply network (for an entire state of the art, see [23]).

Lazzarini et al. [17] demonstrate the interest to mobilize a SNA by the particular indisputable fact that offer chain analysis suggests vertical interdependencies that require “a systemic understanding of resource allocation and knowledge flow between firms”. The interpretation of supply chain by an SNA is interesting because “supply chains don't seem to be really linear chains but most often expansive networks”, which explains the neologisms “supply networks” or “net chains” [17, 20, 23]. in line with Carter et al. [19], SNA “can be applied both within and between organizations in an exceedingly supply chain”. SNA analyses the structure of a network and map the relation among a gaggle of actors. The relations can represent linking, communication, service or products. SNA describes and analyses the interrelationships of units or nodes within a network. In fact, SNA contribute to maps the complexity of supply chain. Supply chain consists of several nodes, which could be call “actors”. Each actor may well be a personality, a link of the chain, part played by a performer.

Our work follows this path, while trying to travel further. Indeed, our goal here is to assess and map all levels of network modeling of the herbal supply chain, supported SNA [24–27]. per Kim et al. [23], “the term of ‘network’ into supply chain management research represents a pressing have to view supply chains as a network for firms to realize improved performance, operational efficiencies, and ultimately sustainable competitiveness”. Theories of social networks allow taking into consideration all the social interactions that will influence the selection of actors of the provision chain and provide chain as an entire, because each actor isn't isolated but is an element of a collection of relationships, which influence their choices. Thus, we accept as true with Borgatti & Li [21], who argue that “the ego network concept is maybe the closest to a supply chain theorist’s intuitive understanding of a supply network, but it's not an ideal match”. we'll talk to a “meso-social” level analysis, i.e., expanded to actors’ relations. Three levels of study are to be considered for modeling the provision chain: the triad [28, 29]; the group [21, 30, 31]; and also the complete network [29, 30]. In general, research in logistics offers several possible analysis units such as individuals, functions, companies or organizations, sectors or industries, interfaces or relationships, chains where the emphasis is made on flows between companies or projects, processes or information systems [32]. The three levels of analysis for modeling herbal supply chain include the following items: triads, groups and complete network. Nodes are composed by several actors and ties are only “contractual relationship” of several types: purchase relationship (Herbal grape grower or producer and raw materials supplier, grape grower and producer sells Herbal grapes), contractual outsourcing relationship (freight forwarder), relationship selling, relationship norms (implementing the same standard quality). In our exploratory analysis, it is important to

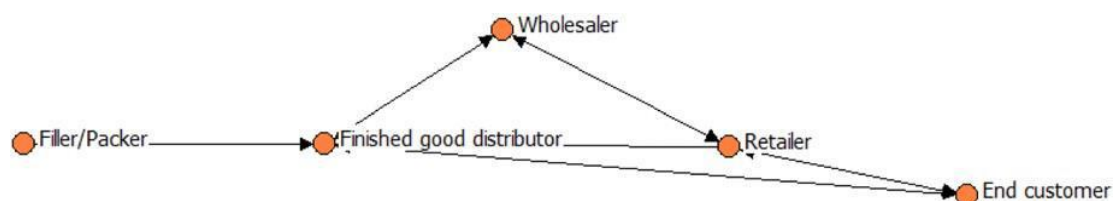
have only one unit of analysis to assess the three levels of herbal supply chain. The unit we have chosen is the “contractual relationship” allowing us to go beyond the mere supply network. Our model is a simplified representation of contractual relations between actors in a generic form that each country will have to take ownership. We seek to reflect the diversity of actors and not their number. Then, each actor is actually a community.

### The Trisect Model

In a trisect each central actor has a different role. Table 1 below provides an illustration of different possible roles. Being inserted into a network facilitates the solution of problems and reduces costs (transaction, coordination, opportunity, etc.). For example, adhering to standard GS1 allows each actor in the supply chain to be connected to the upstream and downstream actors by a following up of standard. The GS1 system of numbering and bar coding applies all along the herbal supply chain: from the grape grower to the retailer, to facilitate traceability. As an illustration, the grape grower is responsible for the production. Each plot or block of vines is identified with Global

**Table 1.** Role of central actors.

Trifecta	Example of role for the central actor in the triad
Freight Operator – Importer – End consumer	Intermediate To turn them into its own advantage, dealings between networks members
Freight Forwarder – Freight operator – Importer	Broker To facilitate or control the flow
Filler/packer – Finished goods distributor – Wholesaler	Coordinator To reconcile several options of network members and align goals
Wholesaler – Retailer – End consumer	Agent To distributes source
Transit – Filler/packer – Finished goods distributor	Hub To facilitate or control the flows of supply across the whole network



Distribution on national market.

Location Number (GLN), which is allocated by the grape grower. After the transformation from juice to Herbal, the Herbal producer adds to GLN identification, a product identification (GTIN), a shipping container identification (SSCC) and the quantity of Herbal dispatched (AI). When the bulk distributor received the Herbal, he adds a new identification, and so forth. Normative social relationships help bringing favorable factors to the firm's performance (in terms of trust, traceability and information transfer), which are not found in the adjustment by the market.

### **Integrating conventional LSP in the modelling**

Fulconis et al. give a general but adequate definition of the LSP: "A firm ensuring the performance of logistical activities on behalf of a manufacturer or a large retailer". But there immediately follows three LSP families, depending on the complexity of their service offer, not on their strategic position in supply chains: conventional LSP, simply executing physical operations related to transport, handling and storage of customers' work-in-process components or finished goods along a supply chain; value-added LSP, who additionally include the management of manufacturing operations (e.g. some form postponement activities), administrative operations (e.g. invoicing) and information operations (e.g. tracing and tracking); and dematerialized LSP, who own almost no physical resources, but build a customized service offer for their customers by involving the resources from different partners.

### **The value-added logistical services**

With a historical perspective, manufacturers have been long-standing adepts of own account logistics. In the 1920s, they manifest the will to organize their business structure by abandoning wholesalers and independent traders, accused of hindering the implementation of an active sales policy. Examining the cases of bottled mineral water in France, Marty [38] underlines how wholesalers were to remain present until the 1960s, before disposable packaging (without consignment) was massively adopted by manufacturers. The rationalization of logistics would not be on the manufacturers' agenda before many decades, but the ownership of regional warehouses, although having narrow market coverage, allowed them to reach small retailers without colliding with the intermediaries. In other words, the will of manufacturers was to control the supply chain to accompany their marketing strategy in gaining control over clients. On their side, and nearly at the same moment, a few large French retailers like Casino and regional cooperatives understand the interest of integrating the wholesale function. The significant increase of capacities of goods storage (and consequently of purchase) shows the possibility to increase the negotiation power vis-à-vis the manufacturers by buying directly from their factories. Here again, the option chosen is the own account logistics, for lack of a relatively efficient rental storage offer. Indeed, numerous large British retailers having taken control of the wholesale function start to turn to LSP to ensure the entire tasks linked to store purchasing. We can identify Expel Logistics as being the first modern LSP, following a partnership operation with Marks & Spencer in the middle of the 1970s.

The field study concluded, from a cluster analysis, that there were four types of LSP, with 27.1% labelled as “Full-service providers”, because their level of capability is high in each logistical service (FFD, VAL and TEL). The study also emphasizes the presence of an unusual group of LSP, called “Nichers”, who as a priority have developed capabilities in the value-added and technology-enabled logistical services (VAL and TEL), to the detriment of conventional freight forward service (FFD). Finally, LSP centered on basic transport operations now only account for a quarter of the sector. The large number of LSP have developed new value-added services that shows the magnitude of logistical mutations in some South-Eastern Asian countries that are probably occurring at a greater speed than in Northern Europe. This type of mutation is not due to chance. It simply corresponds to the fact that LSP have known how to progressively widen their service offer to answer the expectations of manufacturers and large retailers who have also progressively abandoned many logistical activities to better dedicate themselves to the management of their core business.

### **LSP in the Herbal Industry**

At last, what role can be played by the PSL in the present changing context of herbal supply chain? The French case is interesting. It represents an avant-garde tendency that other countries could watch closely. French large retailers occupy an ever more prominent place in Herbal commercialization, including some of superior quality. Thus, it is not unusual to buy renowned Champagne or a Grand Cru of Bordeaux in a grocery store, in a hypermarket or in a convenience store. Undoubtedly, superior quality Herbals have become more accessible, and their logistics is comparable to that of convenience goods. The LSP have built their expertise and their legitimacy from 1980 by working for large retailers, and taking over highly developed additional customer services. The LSP key factors of success were to organize higher volume flow of a kind never experienced before.

Looking at sources of competitive advantage deployed by LSP since their emergence, and to their expansion as a result of expanding their expertise area, it is possible to identify several meaningful elements that further invite to consider their ability to rapidly integrate the herbal supply chain. These meaningful elements provides references to existing dimensions considered as “cultural”, referring to the culture as the way of thinking a formalized action, acquired and shared by a plurality of individuals and/or organizations, that constitute in fine the fundamentals of a community with overall coherent behaviors [43]. The relevant dimensions are as follow:

LSP own a historical culture of products routing towards hypermarkets, supermarkets and convenience store; it is the “core” of their business model. The main idea is to consider the pooling of products as a system allowing important economies of scale and scope. The centralized hypermarket and supermarket procurement system, established in the early 1980s, is based on shared warehouses and platforms for a number of retailers. LSP have learned very early to associate heterogeneous products, including for competitors, by underlining the importance of standardization to reduce the retail shop unit procurement cost.

Finally, LSP have a social culture of routing products towards hypermarkets, supermarkets and convenience store; they are embedded in numerous social (relational) networks by their activities bringing them at the interconnection of several business sectors, product families, value chains, etc. Regular contacts are tied at the decision-maker level, learning to know each other, developing positive effects, even empathies, favorable to the establishment of sustainable partnerships. The human part relative to collaborative supply chains success is an important research topic nowadays. herbal supply chain history points out the importance of strong personal relation between individuals from a same region, a same terror. This culture of direct interaction is conducive to the LSP, specifically in the case of 4PL.

In other words, all the evidence suggests that innovative LSP are able to remove without difficulty obstacles to market access, as they learn to do it in an emerging way, and more and more deliberate over time, for other supply chains in which they were present at the beginning (for example, pharmaceutical distribution). By the way, using LSP for herbal supply chain members represents without any doubt an effective reply to face the predominant position of some bulk Herbal distributors. Economic conditions, but also environmental pressures, are therefore extremely favorable to the development of LSP in the French herbal supply chain. It is an open question whether these actors will be qualified, in contractual terms, to exploit this competitive advantage and, above all, if they will have a sufficiently adaptive know-how to manage specific constraints relative to quality Herbals, in terms of products conservation for instance. Otherwise, there will be a risk of seeing new dynamic players, or historical operators as freight operators or wholesalers, monopolize the business.

### **Results**

The modelling exercise of the herbal supply chain offers two interesting conclusions. Firstly, it improves the understanding of the flow structure between the different supply chain members, how they are organized and what are the possible enhancement sources in their organization. Secondly, this exercise of modelling the herbal supply chain enable each of supply chain members to know is position on the herbal supply chain, the central role played by actors sometimes physically far from him, and after all to identify which actor can be considered (or not) as a node in the herbal supply chain. It is necessary to go beyond a cartographic representation of flows, as it may often be found in specialized research on supply chains optimization. Indeed, the cartographic representation may not be sufficient to study dynamic evolution of supply chains, especially with the old flow organization destabilized by new competitors. However, these new competitors are central in supply chains reconfiguration. That is why we investigated how LSP could durably transform the herbal supply chain using the European experience, in particular the French one, on logistics industry development since the 1980s. The increasingly variety of LSP skills in terms of flow monitoring are undeniable. However, the arrival of powerful LSP raises several questions and it is imperative, to answer them, to build a research agenda as robust as possible. In our opinion, three thematic need to be investigated in priority:



### Conclusion

Therefore, it leads to explore last thematic related to organizational issues and linked to the LSP capacity to become integrated into communities of practice established over decades. Thus, in France, the Grand Crus commercialization depends on a slimmed-down collective of individuals located on a confined territory. They know each other, like each other or hate each other, but in the respect of implicit conventions. Strictly speaking, we are in a very small world where intruders are sometimes not welcome. Community of practice, in this case, is built on a common value system and belief, a human ecosystem where individual concerns face the requirements of dominant collective strategies. It would be also possible to mention the Champagne, or the Sancerre, but the reasoning could be applied to many other territories. Nevertheless, there is some uncertainty about the capacity of LSP to penetrate easily these human ecosystems, mostly if they appear completely separated from territory. If the LSP unquestionably have a multiple dimensions culture enabling to consider their assimilation in the herbal supply chain, it is a vital condition that may not be sufficient to ensure their development.

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## **Business Models of Startups in India Towards Sustained Success**

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### **Abstract**

‘Start-up’ is a magic word which is reshaping the commercial activity of buying and selling goods and services. India is also witnessing numerous start-ups across sectors which are aiming to catch hold of their target customers. The basic idea to venture into a business start-up is to cater the unmet need of target customers and offer products and services with innovative ways. India is fast emerging as a start-up nation. The Indian technology landscape has seen a tremendous growth towards creation of innovative startups and has emerged as the 3rd fastest growing hub for technology startups in the country. The Indian startup ecosystem is maturing, driven by young, diverse and inclusive entrepreneurial landscape. This is leading to emergence of focused domain solutions for verticals like healthcare, agriculture, Fintech, aviation, logistics, supply chain management and education. Startups in India as in many other parts of the world, have received increased attention in recent years. Their numbers are on the rise and they are now being widely recognized as important engines for growth and jobs generation. Through innovation and scalable technology, startups can generate impactful solutions, and thereby act as vehicles for socio-economic development and transformation. The Indian startup ecosystem has evolved dynamically over the last two decades. Some startups were founded in the 2000s, but the ecosystem was still immature as only a few investors were active and the number of support organizations such as incubators and accelerators was limited. Some successful exits occurred in the late 2000s and in the last ten years, the number of start-ups increased fast and more support has become available in all dimensions. Bangalore has emerged as India’s primary startup hub, but significant founding activity is also taking place in Mumbai and the National Capital Region (NCR), as well as some smaller cities. It is a testimony to the potential of the start-up landscape and the scope of growth and opportunity that India presents. Today, 1 out every 10 unicorns globally have been born in India. Overall, 2021 is experienced an exponential boom when it comes to startups entering the unicorn club. This is a testament to the vibrant start-up ecosystem present in India. The Unicorns like Flipkart, Musigma, Ola, Paytm, Quikr, Inmobi, Zomato were started with humble background in the last two decades and now emerged as world class organizations. This paper attempts to focus on handful of successful Indian start-ups and their ability to withstand and shine in hyper-competitive business scenario.

### **Introduction**

To aid the people who're in fond of creating their own start-up to benefit them, the Government of India made a great initiative in 2016 by launching start-up India. The mission and vision of the association is to boost up start-up culture and to create an environment which can ease the entrepreneur's struggle. Currently India holds the 3<sup>rd</sup> place in start-up ecosystem. Most of the Indian start-ups are falling under these 3 major sectors – IT Services, Health / life sciences and education. But right now, there's a recent trend followed in the start-up there's a sudden boom in the Fintech companies.

### **Notable Unicorns in India**

Zomato (Food aggregator)  
 Flipkart (e-commerce)  
 Policy Bazaar (Fintech)  
 Biju's (ed-tech)  
 Dream11 (Gaming aggregator)

### **Successful unicorns**

#### **Flipkart**

It was the Indian company acquired by Walmart in 2018 by bought a controlling stake for \$16B.

It does not have issued any IPOs yet.

Most of the funding's for the company are from the venture capitalist.

The company has a loss of 24 billion Indian rupees in the financial year of 2021 in India.

#### **Investors**

Tencent.  
 Softbank vision fund.  
 Qatar investment authority.  
 Canada pension plan investment.  
 Walmart.  
 Franklin Templeton investment.  
 Tiger global management.  
 Khazana national.  
 Antara capital master fund.

#### **Importance of Sustained Success**

Companies which are striving for success have to understand ethical perspectives of their business models, campaigns and societal impact of their products and services.

#### **Dream11:**

1. Dream11 is an Indian fantasy sports platform that allows users to play fantasy cricket, hockey, football, kabaddi, handball, basketball, volleyball, rugby, futsal, American football and baseball. In 2019 dream11 became the first Indian gaming company to become a unicorn.
2. It does not have issued any IPOs yet.

3. It has a venture capital fund of \$250 Million. And mostly started with a Venture Capital fund.
4. The Indian fantasy sports market is on its way to becoming an international behemoth, estimated to grow from \$4.6 billion in FY21 to over \$22 billion by FY25 as per a recent report by the federation of Indian Fantasy sports in partnership with Deloitte.

#### **Investors**

- Falcon edge.
- DST global.
- D1 capital.
- Redbird capital.

Even though the company is maintaining hard to run its business in the market, but the way chosen by them isn't in an ethical & moral ways, even though it is backed by several cricketers (current & retired)

#### **Under-Performing Unicorns**

- **Zomato:**
  - IPO issued in July 23, 2021 and the issue price was 116.00
  - valuation at IPO is 910B and the money raised at IPO was \$1.3B.
  - It was mostly held by its investors.
  - At the present time the share price was just 59.75, the reason for the loss is it has been impacted the worst among tech-driven platform based listed companies in India and the Rs.97000 crores of investors wiped off since after the July 2021 quickly

#### **Investors**

It has around 28 investors and the leading 10 investors are,

- Franklin Templeton investment.
- Fidelity.
- ICICI prudential life insurance.
- Tiger global management.
- Fidelity management and resources.
- Bow wave capital management.

Zomato's most notable exit investors are blink it and grab.

- Dragoneer investment group.
- Luxor capital group.
- Mirae asset venture investment.

#### **Policy bazaar**

- It is an Indian insurance aggregator and multinational financial technology company based in Gurgaon, it was founded in 2008 and expanded its operation to the United Arab Emirates.
- It does not have issued any IPOs yet.

- Most of the funding's for the company are from the investors. And Softbank is the leading investor of it, and it holds 15% of stake in it.
- 4.PB fintech the parent company of policy bazaar, reported a 454% increase in its net loss to INR 832.91 crores during the financial year 2021-2022 from INR 150.24 crores in financial year of 2021, primarily due to a sharp rise in its expenses.

### **Investors**

- Softbank group.
- Info edge (India) limited.
- Tencent.
- Claymore investment.
- Falcon edge.
- Tiger global management.

### **Hiccups in Start-up**

Despite all success of the unicorns in India, the business model, product market fit, will have an impact on their profitability, expansion, survival in the long run.

Over the last 2 consecutive years Indian startups received large funding from global and domestic private equity and venture capital investors, turning many of them into unicorns

Any start-up must think beyond their comfort zone and have to find ways and means for their sustained success

Ethical bound and legally valid companies are most sought of the ones for its stakeholders

### **Product market fit**

The term product-market fit was originally coined by entrepreneur, investor, and software engineer, Marc Andreessen:

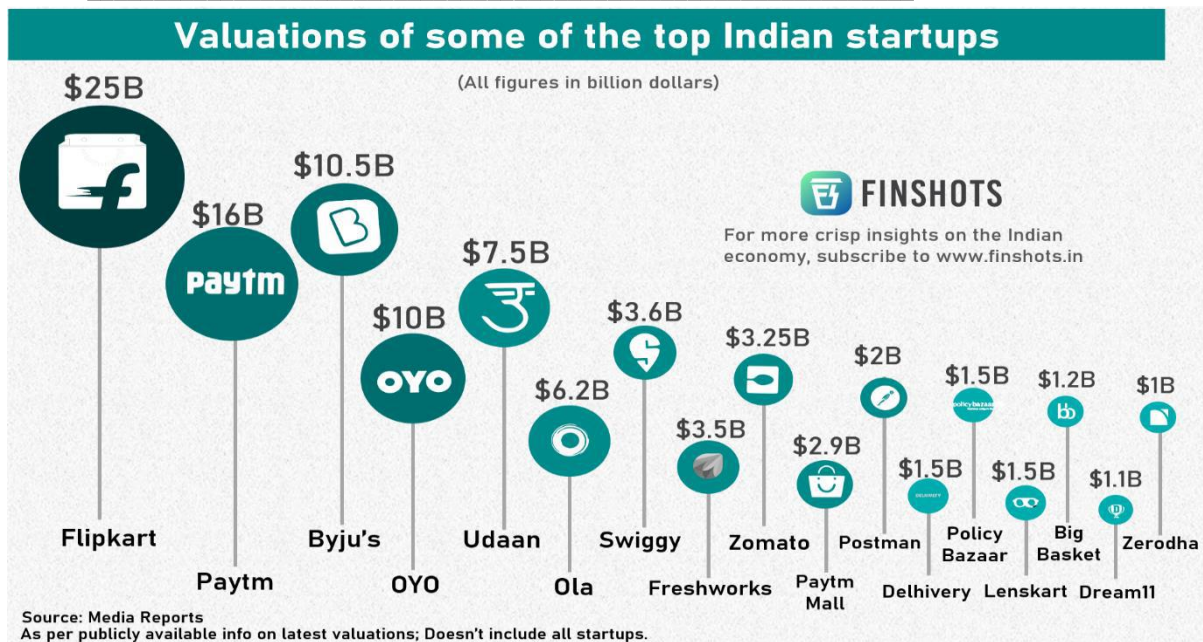
“Product-market fit means being in a good market with a product that can satisfy that market.”

A “good market” is one that's either large enough or has enough demand to be profitable – ideally both.

A small market can be profitable if there's a high demand for what you offer and a massive market might completely ignore your brand if your offer doesn't spark interest.

Ex: Too many companies have failed because they misunderstood product-market fit – Blackberry is a good example.

The same quality that originally perfected their product-market fit, the full keyboard, was the exact quality that turned their customers away because their needs changed. In other words, product-market fit means you are offering something that a group of people needs and there's enough people in that group to provide sustainable growth for your business.



### Aviation Sector

Even though there's an escalation in no. of journeys in the airlines (aggregately) but aviation in the Indian market is to be considered as "Graveyard". Since it is because of the profit margins. It is just because of the split between low-cost carriers (LCC) and full-service carriers (FSC) in India has been 80:20 lately. Globally, LCCs make money by flying to secondary airports at lower costs, avoiding selling inventory on Global Distribution Systems (GDS). The airlines are attaining only a minimum if thin hair level profits only. Even that too are fluctuated by ATF (Aviation Turbine Fuel) which accounts 5%-40% of the airline costs

also, the wages & salary paid to their workforce (The above picture will witness, how till the time the Indian Civil Aviation was) v Followed by operational costs. In India still the bookings are done via only through the travel agencies only which also acts a major profit slicer here. The boarder amount in booking air tickets through direct site is still lesser compared to travel agency ticket bookings. But recently the Indian Warren Buffet (Late) Mr. Rakesh Jhunjhunwala made a debut in this sector, even he too started only a low-cost air carrier

### Conclusion

Every unicorn is created only by Business. But every business won't be turned as unicorns. Every business will be turned out as unicorn only when it is bearing & successfully enduring its hurdles, hiccups, & also to satisfy various parameters. All Business / unicorns have to run, just in-order to sustain or to keep its position also to have a competitive advantage among their co-players.

The unicorns of India give most of the GDP to the country. It was undoubtedly a great achievement for the start-up ecosystem in the country, which is also known as the third largest start-up ecosystem in the world. However, only 25 of these coveted unicorns are profitable.



India is a land of opportunities and emerging as economic powerhouse of the world. It is the time to create start-ups which will have promising growth trajectory

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### On-Kart Decentralized E-commerce Application through Blockchain

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### Abstract

The goal of On Kart is to decrease the commissions and over charges by current e-commerce sites by creating decentralized P2P transactions between buyer, seller, and delivery person. Hence, this provides decentralized application which is friendly to use. This system follows Consensus based Block chain network which is more secure, and its functionality is protected by smart contracts. And we are providing a comfortable user experience with the best prices available. On the Consensus block chain networking, the solution has been analyzed with the help of experimental evidence. In terms of latency and through put demonstrating the on-kart decentralization effectiveness in the products of e-commerce, the results are discussed for the betterment of safety of products and to ensure that there is sustainability in terms of society and finances. The researchers with the help of this work can better understand the implications of blockchain for the possibilities of the decentralized system in future developments in society.

### Introduction

E-commerce in today's world is a huge topic and a huge industry. In this decade a lot of technological advancements have been done and it has vastly improved every domain. And e-commercial so one of the domains which has been vastly improved. At 1980's or 1990's everyone was buying products by visiting the nearby shops. At that time the people were doing things in offline which was bringing the trust for them, and it was a hard thing for them. But, after the introduction of internet, many online applications are developed, and many got its success. E-commerce was one of the main domains which has a big spike in its usage across the world. People does not need to go to their nearby shops to buy something. Instead of it they can buy any product from their home with the help of their computers or phones. This was reducing the work for many people who doesn't like to go outside and buy it in offline.



### **Literature Survey**

Today's shoppers are expected to organize such products as cell phones, beauty, and health products, used product sales, smartwatches, smart home products, e-book sales, children's toys and games, clothing, electronics, or food genres, etc. From a close by ordering while sitting at home rather than exchanging of information, shopping for or merchandising product/services from person to person while without use of internet. This has led to the tremendous usage of online and e-commerce applications. E-commerce is nothing but a digitalized shopping which has been running on the internet. With the world-wide usage of e-commerce sites, it has become a big business model, with a sale of more than \$4.89 trillion in 2021. And it is also expected to grow up to \$6.30 trillion by 2024. And, crypto currencies are also growing very well around the world as its market capitalization in 2020 was more than \$758 billion. The decentralized e-commerce will be in away where it is not controlled by any organization, and it will make the buyer/seller to communicate with each other. This gives more transparency, and it will benefit in the development of a sustainable growth. This can be achieved by Block chain for the financial growth and social perspectives; the e-commerce has its major contribution especially in the past few years. Customers are growing in number and they are feeling comfortable in moving from custom management of phone to the digital phases allowing them to establish and organize the wide range of applications of e-commerce from various stores at web at a single application or a single website.

### **Related work**

In a standard e-commerce application, you provide the personal details. Then enter the application and search for the product and add the product to the cart. Finally, select the payment strategy and order the product. The organization of the application assigns a delivery partner to the seller. The delivery partner picks up the product and forwards it to the customer with the help of the application.

### **Problem with the Existing System**

The e-commerce transport industry is also experiencing centralization and a lack of transparency. The major e commerce aggregators here are Amazon, Flipkart, eBay, etc. And they charge around 20% to 30% of the commission for each product requested through their app. The shipping specialist is not paid for the work and the seller is not paid enough which makes seller and transport specialists as victims. In this sense, it cannot be tackled without mechanical mediation. I hope blockchain technology can eliminate the problems faced by centralized applications by forming a decentralized and trusted organization with people governance.

### **Centralized Solution**

In India, both Amazon and Flipkart are considered as fast-growing aggregators. It is expected, that the market of e-commerce in India is likely to reach to \$111.40 billion by the end of year 2025. It means, there will be a net increase of \$

46.2 billion in the year 2020. The Gem (abbreviation of Government e-Marketplace) portal on 9 August 2021 processed 7.23 million orders worth Rs.127.231 crore (\$

17.12 billion) from 2.40 million registered sellers and service providers for 53, 575 buyers. Flipkart, one of the largest e-commerce platforms in India, handles around 8 million shipments per month. Over 4,000 Amazon products are retailed in India. Amazon offers 168 million products to its Indian customers. 218,000 sellers are actively selling on Amazon India.

### **Issues with Existing Solution**

A lot of sellers are battling with high commissions and, they are getting terrible rewards for their products. High fees, low salaries, but no welfare. At the same time, the realized transportation management continues to lose more than \$10million. Sponsors must produce a larger cost estimate for compensation. These aggregators impose compulsory boundaries and fees on them.

### **Counterfeit Products**

Many fake products are sold to many customers through these e-commerce aggregators. On February 18, 2021, Shenzhen Jizya Photo Industrial Ltd, the Chinese owner of BOYA wireless microphones and accessories, filed a law suit in Delhi High Court against Flipkart, Amazon India, Paytm Mall, Tata Cliq and Snapdeal for allegedly selling counterfeit versions of the product. For supposedly selling “fake and counterfeit” cosmetics two of the e-commerce platforms Amazon and Flipkart accepted a notice from the Indian Drug Control Authority. E-commerce aggregators face a difficult situation when trying to identify counterfeit products and there is no proper way to weed out counterfeit products.

### **Lack of Communication between Buyer and Seller**

There is no means of communication between buyer and seller. And it can cause big trouble because the seller can send other products instead of the one the buyer wants. On October 13, 2021, an individual ordered an iPhone 12 from Flipkart, intrigued by its price when it sold for large sums. However, instead of the brand's new smartphone, it comes in two soap packs. This is one of the most important cases that happened in the past. This cannot happen if the buyer can effectively communicate with the seller directly.

### **Reduced Transparency in Discounting**

Deep limit is a way to decrease the price of items to push deals, it was a notable way of stepping forward in to an online product. While it increases the number of deals, and it is also destroying the items acquired for the sold unit's quantity. For all the small-scale sellers at e-commerce, this has been a key concern.

### **Lack of trust between delivery partners and conveyance application**

On March 24, 2021, Amazon India's shipping partners called for a 24-hour strike in Hyderabad, Bangalore, Pune, and Delhi-NCR to protest the e-commerce company's decision to cut shipping rates. Transport juveniles went on strike. In fact, this happened when e-commerce applications lowered their compensation for shipping workers. Although the matter was carefully investigated, trust between the two was broken. Freight operators have concluded that if a professional organization decides to recover the cash, they may not be able to solve the problem.

### **Delivery Partners Assuming with Fake Identities**

Some Uber drivers use bogus identities and shared accounts and at least 14000 trips were made by unauthorized drivers. This has caused great concern for the users of these types of centralized applications. This allows organizations to reduce fees for significant benefits.

### **Private data is not secure**

Last year's Big Basket data breach appears to have exposed data from a number of users of In India, the Flipkart and other are most liked platforms. The business to business or Bizongo platform

is also available for the automation supply chain. This exposed 2.5 million files allegedly to have data of client's security researchers say. The exposed data included the names, addresses and phone numbers of various customers who received orders through the Mumbai- based company. In some cases, researchers found in voices containing purchase details and financial information about Bizongo customers. The company counts Amazon, Flipkart, Myntra, Swiggy and Zomato among its customers using B2B supply chain and supplier management solutions. These kinds of cases pose a big question mark for many people using these centralized platforms. There is a big chance that data will be disclosed using these platforms.

#### **Remuneration is Limited to Commissions**

Due to centralization, the sellers or delivery partners are not getting their deserved salary because of the higher commissions that are demanded by the conveyance organizations. Conveyance platforms are getting more profits whereas the actors who are making it popular are becoming victims. This allows organizations to reduce fees for intentionally gaining benefits. This makes it challenging for the e-commerce employment to thrive in the employment.

#### **Fake Order and Order Manipulation**

In e-commerce and online shopping, we can see an ever-increasing demand and interest of the customers and this has been one of the key factors in underpinning the e-commerce industry's visible role. For the well-being of e-commerce community, the trust of customer is very important factor. Any fraud by the buyer or seller end can spoil and harm this trust level. The counterfeit orders can be viewed from the point of view of consumers as the breaching of trust caused by e-commerce losses. A fake order is an order that is intentionally cancelled during the packing and shipping stage. An effective mechanism for reducing the number of counterfeit orders, reducing packaging and shipping losses, and improving the relationship between businesses and consumers.

#### **Lack of Transparency**

Buyers who are using these centralized platforms doesn't know whether these aggregators are showing the real price for a product. The buyers trust these platforms in everything. The buyers don't know whether the seller is a legitimate/fake seller. The buyers don't know whether the product is real/fake. The sellers are also not having a clear transparent view of how many numbers of their products is being sold & they also doesn't have a clear-cut transparent view of how they are getting low rewards for their products. This lack of transparency is a bigger problem in these centralized platforms.

#### **Reduced confidence in Product Quality**

Trust is the most important ingredient for sustainable transactions. With the trust concept, the settlor trusts the trustee. In electronic commerce, the settlor is the buyer and the trustees are the intermediaries and the seller. Carry out transactions. Trust is the buyer's judgment and comprises two different concepts; Both trust and distrust reside in the settlor. Confidence in the sending quality of products has decreased from the moment the e-commerce products were defective announcing the shipping of the inferior products for online shipments, plus customers have no chance to meet you until the product is for used a certain time.

#### **Proposed System**

Before using block chain, you were limited to the world of crypto currencies. After the release of Ethereum, we can now make decentralized applications very easily with the help of smart contracts which are programmable. But, here in this project we are using Harmony (ONE), which makes dapps highly scalable. Harmony is a decentralized network which supports smart contracts, and which uses Proof of Stake as consensus algorithm. This helps to store information inside the Blockchain. Through the consensus and with the help of smart contracts, it is easier to collaborate with Blockchain. These are monitored by Ethereum Virtual Machine (EVM), which is supported by Harmony as it is across chain network. A smart contract is nothing but a program which does some dedicated tasks with conditions. If a smart contract is deployed in the network means it cannot be changed. Every participator will be updating their information in the contract and the contract will be governing the entire transaction. The contract works in a way that it makes agreement to be done between buyer and seller. It is being verified by everyone who is participating in the network. The buyer can directly send his money to the contract and the seller will send the bar code of the product to the contract to track the product. And the transaction will be verified by everyone who is participating in the network. And after the buyer receives the product, the contract will send the money to the seller as well as the delivery partner.

#### **Decentralization**

Currently, the built-in ecommerce aggregator app charges a fee of around 20 to 25% on all requests, and the fees match the numbers. There are individuals in the chain, these costs limit the development of the business, and also the clients usually reward a high amount when using the application. Blockchain can remove traffic management apps from the chain, replace external app owners with merchant owners, and reduce the fees paid by customers, while providing significant cash flow to both vehicle drivers and sellers.

#### **Buyer/Seller authenticate via KYC**

In our application, we have a KYC authentication for buyer, seller or delivery person for registration and it will be stored in Blockchain. And it will be publicly visible for everyone who is participating in the network to bring trust and loyalty.

#### **Fee Levels Controlled by Smart Contracts**

The trust of buyer, seller and delivery person can be achieved using smart contracts. With the help of smart contracts, a genuine transaction can be done by mutual agreement between all the parties in the network. This helps in controlling the fee levels. It can also be programmed in a way that if some parties do some mistake, then they will be penalized for it.

#### **Trust in the Network**

In Block chain, every transaction is recorded, and it can be viewed publicly by everyone who is in the network. And no one can tamper the data in Blockchain as it is tampered less. So, this brings trust between everyone who is participating in the network.

#### **Delivery Partner Assuming with Fake identities**

In the shipping partner KYC with the help of block chain, there is storage of all carriers and their biometric information. Timely checks are essential for the shipping partners as they ensure that appropriate goods are delivered by the right person.

### **Revolution of Crypto currency**

The payments can also be made with the help of crypto currency and tokens. The consumers receive some special offers and discounts whenever they pay for goods with tokens. In this way, over other competitors, we can get a better position, this also gives harmony as faster blockchain. With 2 – second transaction finality and 1000timeslower fees, our main net runs Ethereum applications. For the assets, collectibles and identity, the Harmony can be an open sort of platform with many secure bridges that offer transfer of cross chain assets with Binance, Ethereum and other important three chains.

### **Genuine transaction**

In blockchain, everything is transparent and the entire transaction is controlled by smart contracts. So, the buyer sends money to the smart contract, the seller sends the product to the buyer's address, the product is tracked using barcode tracking, and the network participant uses the smart contract to verify it. After the goods arrive at the buyer's place, the smart contract will send money to the seller.

### **Consensus using Proof of Stake**

In block chain, consensus is made by network participants. These network members are responsible for completing the transaction. A general consensus algorithm is the Proof of Work method used in Bitcoin and Ethereum, but Proof of Work requires a lot of energy and resources. We are using Proof of Stake which is used by Harmony to solve this problem. Proof of Stake uses less energy and resources to complete a transaction.

### **Order Manipulation for the fake orders**

To make it sure that goods are traceable at any cost, the block chain verification is used by us for the addresses of the users. In the immutable block chain data structure, all the product delivery related information is stored and hence the fake orders cannot be manipulated.

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### **Conclusion**

Our platforms, main aim is to build a trusted, transparent and a decentralized e-commerce application which benefits everyone who is participating in the network. The buyer/seller can communicate with each other, and the commission level is reduced for everyone as there is no intermediary. Since, our platform is governed by our own token it is easy to vote for new improvements and it is easy to distribute rewards to all the participators in the network. Since, our platform was built in Harmony blockchain the transaction fees are very low when compared with Ethereum. And Harmony uses Proof of Stake as consensus algorithm which uses very less resources when compared to traditional Proof of Work algorithm. The users don't need to worry about any security issues and tampering of their information because it is builder upon Block chain. The vision is to build a decentralized e-commerce which benefits everyone who is participating in the network.

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12. Bug Triaging Automation using Text Processing and Machine Learning Technique

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## Bug Triaging Automation Using Text Processing and Machine Learning Techniques

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### Abstract

For well-known software methods, the number of routinely offered bug reports is extreme. Triaging these successful reports is a period-absorbing task. Part of the bug sort is the appointment of a report to a planner, accompanying the appropriate knowledge. In view of this paper, we do suggest at which point, as a matter of typical matter, plan construction workers have the appropriate information for directing a bug report, fixing the acknowledged component identified in the short letter of the bug report. Our work is the first to test the orderly list of architects for forecast truth in bug assignments. Automated categorization and prioritization of bug reports have been examined by many analysts. However, limited progress has been made in this area. In this work, we present bug triaging by way of NLP and machine intelligence.

### Introduction

To bug is human; to troubleshoot is divine. According to these surveys, improving the bug-repairing process would reduce development work and operating system result costs. The ultimate fault-finding states of spreadsheet happening are software experimentation and sustenance. A bug report is created for one operating system control of product quality crew while experimenting

with programmed modules. It holds particularized facts about a distinguishing component or question, that is to say, wanted and expected to be established. The news in a bug report involves many attributes in the form of feature requests, performance augmentation requests, rule mistakes, reasonable mistakes. Software experimentation, sustenance are the ultimate fault-finding steps of a programmed incident. A bug report is created for one programmed control of product quality group while experimenting with programmed modules. It holds particularized facts about a distinguishing component or question, that is to say, wanted and expected to be established. The feature requests, service augmentation requests, rule mistakes, reasonable mistakes, and rapport things. The report consists of differing headings holding the following: composition, summary, paper of the broken component, and open/finished rank. The best question nurtured during the whole study of bug reports is still that the information is a cruel expression. Therefore, it is very bothersome to process and extract dope from it. It demands a dull attempt from the occurrence group to recognize and address the established issues. Many studies that address the issues have a network of accompanying bug reports. These include bug classification and bug prioritization. Bug localization, bug responsibility, bug categorization, bug asperity prognosis, and bug report writing.

### **Literature Survey**

Analysts hold arguments because diverse surfaces about mechanized spreadsheet bug presidency, classification, or prioritization. These encompass desktop power concerning errors jobs, duplicate then related malicious program finding, predicting over malicious program repair periods, malicious program localization, errors categorization, errors harshness yet arrangement forecasts, etc.

Zheng Weiqin et al. performed a metering regarding 327 performers in conformity with attain competencies of computer virus leadership patterns or discovered up to expectation these forms play a principal piece of reconstructing the machinelike leading concerning errors reports

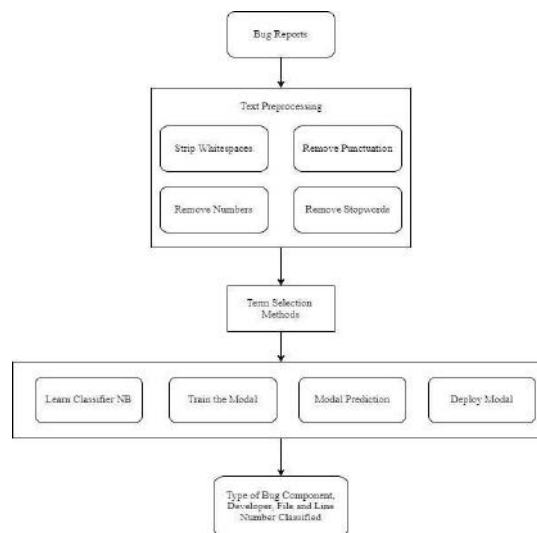
Y. Tan et al. [2] projected a young plan because of anticipating harshness. They related the bug warehouses' posts over lot overflows to the volumes of Mozilla, Eclipse, then GCC bug reports. Three array algorithms, K-Nearest Neighbor Treasure (KNN), Naive Bayes, or Long Short-Term Memory (LSTM), have been ancient in accordance with the harshness regarding bugs.

Chen et al. [3] raised in accordance with avoiding the ineffective rite for harshness guessing. Furthermore, a method over chronic savoring was used after keeping away from ambiguous results appropriate according to report over-imbibing or in accordance with reap a number of equalized datasets. The ensemble approach used to be used in accordance with be part of the arranged classifiers to that amount were built on a number equalized dataset. Four judgments of expressiveness have been used in conformity with decide the functionality concerning the FMR-FI treasure, particularly to suggest, truth, veracity, recall, then f1-score. The effects show up to expectation the FMR-FI posture was dealt with nicely to civilize the classifier's rending for harshness predicting.

### **Module Diagram**

Module Diagram Figure 1. illustrates step-by-step process carried out for accurately assigning the bug report to the developer. The training data contains bug reports of text processed. The term

selection methods reduce the sparseness of the bug report. The classifier learns from the refined bug report and its used to accurately identify the developer. When the new bug report is given the system predicts the accurate developer based on the learned classifier



### Workflow of our Proposed Solution

**Input:** The input briefs the problem in a bug report written in plain language prose.

**Output:** The element at that purpose the bug's risk takes place, additionally to the builder (or list of builders), the one that will fill it. once a client uncovers a problem, he or she reports it to the spreadsheet's bug detective. Tongue process is employed to extract main keywords from the bug report that might supply news regarding the problem that {the client| the buyer| the patron} already is aware of regarding as a result of the bug report provided to every consumer could be a human language paragraph. Stop-discussion discharge and bar area unit used as a backup within the treatment to extract main keywords from bug report writing. supported the sooner intelligent reliance, these culled keywords area unit accustomed decide the final word doubtless moot element. Then, having established the builders' incorrect element and moving expertise, the class of planners are abreast of the question expected to be established. The builders concede the chance of being chosen as if the possibilities of the bug being captive area unit as depressed as come-at-able. The bug report is outlined because the element that accompanies the planner and therefore the element that created the question earlier. it's been established. A reliance structure is fully grown over an opportunity for directed data from corrected defects.

A Data Set is an Associate in Nursing accumulation of established bug reports assembled from Associate in Nursing open starting program bug detective's end holding essential facts regarding the components, builders, and re-appointments. this is often a classified, top-secret, and tractor trailer-organized written account. A bug report, in the main an individual's language plan, endured by every client is stocked within the XML arrange for every bug detective type. info control within the dataset:

First, the dataset within the XML arrange is what we've got secondhand, however it's solely regarding ten,000 reports. to induce higher effectiveness, we have a tendency to secondhand a dataset that's in JSON layout. it's regarding one,60,000 reports in a very well- organized vogue. coaching basic document get into JSON arrange compares the report-id and therefore the melioration ("when") of every report-id in twenty-four specific files and merges the "what" content gift in brief describes (to take the bug report) element (to get the component) and fills an area (the builder) in a very sole basic document file. This basic document file is pre- treated. The pre-treated file is convinced to a feature-heading combine wherever the feature is that the bug report and therefore the element is gift, and therefore the heading is that the builder. The classifier learns from this feature-heading combine and forecasts the right builder for incoming bug reports. Another feature-heading combine (component and builder) intelligent every classifier is secondhand for moving graphs. The contingency of the planner partitioning the bug, specifically the element and welcome moving to a different planner, are linked, and therefore the next cheap builder United Nations agency will fix the bug is persistent.

#### **The project's steps area unit sophisticated.**

The preparation dataset was neo praised once parsing because of stop-discussion eviction and stopping.

The Snowball Stemming treasure is employed to get rid of and stop words.

The written account cluster is convinced to feature headings utilizing a multinomial NB classifier.

The amount, component, Associate in Nursing short writing of every bug from the coaching basic document file area unit parsed victimization an XSLT

computer programmed to provide a unified basic document file.

The report ID of every bug is captured from the designated-to.xml file, and therefore the "when" attribute of every amend of the bug is captured and doubled, in the midst of the matching introductions concisely-desc.xml, amount.xml, and element.xml, and culled and productivity to a basic document get into a layout appropriate for manual handling

The Snowball Stemming Algorithm

The above-parsed knowledge is anticipated to be treated to extract the keywords. stop- word and distinctive. Character replacement is 1st acted upon, utilizing the tongue Toolkit in Python. an equivalent toolkit is then accustomed act, preventing the manual from getting used once the stop-dispute has passed.

#### **Naive Bayes Text Classifier Algorithm**

Through directed education, forms learn from the TDS (Training knowledge Set)—the keywords gift within the writing of the bug and therefore the planner to whom it had been selected. It additional gathers news regarding the duty assignment of bugs. The system uses a Naive Thomas Bayes classifier to categorize the new bugs and to calculate the expectation of them filling an area within the planner. Naive could be a probabilistic technique that uses the Bayes rule of dependent likelihood to come to a decision the contingency that Associate in Nursing instance belongs to a category.

### Tf: IDF Weight Calculation

The Term Frequency-Inverse Document Frequency (tf-idf) could be a mathematical event that's meant to point a discussion of a document in Associate in Nursing accumulation or compilation. This search underrates the normally happening dispute of the documents (bug reports) by fully lowering the effectiveness of bug appointments.

### Linear Support Vector Machine (LSVM)

Support Vector Machine (SVM) could be a somewhat abundant border classifier. it's a heading space settled in Machine Learning order. The aim is to search out a resolution among the reach of 2 or additional categories, specifically maximally faraway from some purpose within the preparation written account. A Binary SVM model could be a likeness of the instances as points act of the arrange for concern that the models of the separate varieties area unit detached by a transparent breach, specifically as spacious as attainable. Multi-class SVM is achieved by lowering the one multi-class question into wide- ranging twofold categorization queries. (Individual-against-all).

### Folding

In the closing readiness and proof approach, as fashionable or chosen later or place, cross-proof, the fabrication 1st collects all bug reports anticipated to be used for TDS (Training knowledge Set), types the aristocracy in sequent order (corroborating the progressive occasion of the bug), then divides ministry into n folds. Within the 1st run, fold one is employed to coach the classifier and, before that, the VDS (Verified knowledge Set). Within the second run, fold a pair of bug reports came to TDS. In general, following preparation or chance, authorizing the VDS from fold n, the VDS is raised to each one TDS for ratifying fold n+1.

Algorithms	Accuracy
Multinomial Naive Bayes	77.728
Bernoulli Naive Bayes	66.10
Linear SVM	88.53

### Conclusion

Machine learning and moving graphs have frozen beliefs for automating bug trustiness. during this paper, we have a tendency to lay the support for future work that uses motor judgement plans to assist mechanical bug maturity by analyzing the impact of varied motor brilliance ranges of knowledge, conduct, attributes, and classifiers busy falseness.

The proposed model with NLP and ML forms a strong base of our proposed work that justify our bug files and state the line number with the developer platforms. This stands as a novel approach in claiming as bug triaging model.



We have proposed multimodal, Bernoulli Naive Bayes along with SVM in which linear SVM gives highest of all resulting in 88.5

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## **Employee Engagement at Printing Industry: An Emphasis In Tamil Nadu**

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### **Abstract**

The interest and field of study is employee engagement. Its importance and growing significance can be described and articulated in various ways, but simply put it is an area which potentially promises to benefit both employee and Industry. From the standpoint of the industry, it seems to deliver a healthier bottom line as well as other key metrics seeing favorable results. From the standpoint of the employee, we see turnover down and the acquisition of key talent which indicates a strong desire to want to be a part of Industry's conscious of employee engagement. The objective of this study is to investigate whether teams are more engaged and productive when led by an optimistic manager. Furthermore, we hypothesize that optimistic managers embody positive leadership employing a strengths-based approach, maintaining a positive perspective, and frequently providing recognition and encouragement which increases the engagement and productivity of their employees.

### **Introduction**

Employee engagement is a fundamental concept in the effort to understand and describe both qualitatively and quantitatively the nature of the relationship between an Industry and its employees. An engaged employee is defined as one who is fully absorbed and enthusiastic about his/her work and so takes positive action to further the Industry's reputation and interests. There are research studies which are very clear about how engaged employees lead to higher profits and increased growth. An engaged employee has a positive attitude towards the industry and its values. For an employee to be engaged, employee need to believe that the industry genuinely cares about them. Therefore, this project attempts to measure the level of employee engagement in Printing Industry.

### **Review of Literature**

**Harter, Schmidt, and Hayes (2002)** completed a meta-analysis of prior studies on employee engagement that were conducted by the Gallup Industry. The researchers examined the relationship between employee satisfaction-engagement, and the business-unit outcomes of customer satisfaction, productivity, profit, employee turnover, and accidents.



**Harter, Schmidt and Hayes (2002)** define employee engagement as the individual's involvement and satisfaction with as well as enthusiasm for work.

**Wellins and Concelman (2004)** suggest that "Employee engagement is the illusive force that motivates employees to higher levels of performance. This coveted energy is an amalgam of commitment, loyalty, productivity and ownership." They further added that it includes feelings and attitudes employees have towards their jobs and their Industry.

**Robinson, Perryman and Hayday (2004)**, define "engagement as a positive attitude held by the employee towards the organization and its values. An engaged employee is aware of the business context, works with colleagues to improve performance within the job for the benefit of the organization". They further add that organization must develop and nurture engagement which is a two-way relationship between employer and employee.

**According to Freeney and Tiernan (2006)**, an important distinction between engagement and burnout is that burnout relates specifically to job demands. But Engagement, on the other hand, is indicated by job resources such as job control, the availability of learning opportunities, and access to necessary materials, participation in the decision-making process, positive reinforcement, and support from colleagues.

**May, Gilson, and Harter (2004)** conducted a field study in a large Midwestern insurance agency. Using a survey format, they explored why some individuals fully engage in their work while others become alienated or completely disengaged. Results of this study confirmed that engagement differs from simple job satisfaction.

**Saks (2006)** surveyed 102 employees of a variety of industries and in one tested a model of antecedents and consequences of job and organizational engagement. Saks (2006) differentiated job engagement from organization engagement and concluded that organizational engagement is a person's attitude and attachment to his/her company, whereas employee engagement is the degree to which an employee is actually absorbed in the performance of his/her own individual job role.

**Bakker, Hakanen, Demerouti, and Xanthopoulou (2007)** surveyed 805 Finnish teachers to investigate the role of available job resources in mitigating the negative effects of disruptive student behavior upon teacher's engagement with his or her job. The researchers discovered that, while disruptive student behavior was negatively related to a teacher's job engagement, job resources such as supervisor support, innovativeness, appreciation, and organizational climate were important factors that helped teachers cope with demanding and disruptive students.

**According to Johnson (2011)**, a negative correlation exists between instances of workplace deviance or counterproductive work behaviors and levels of employee engagement within organizations

### Objectives of the study

The main objective of the study is to

1. To study the factors related to employee engagement.
2. To measure the employee engagement in Printing Industry.
3. To assess the relationship between demographic factors and employee engagement.

### Scope of the Study

The purpose of this study was to examine factors that predict level of engagement in employees of Printing Industry. This study will help the industry to know the current levels of engagement of their employees, and will allow them to take necessary actions to motivate them to perform better and enhance their satisfaction and intention to stay in the industry in the long run.

### Methodology

The study used Convenience sampling techniques to collect the data from employees of printing industry through structured questionnaire method. For collecting the data, the study selected Sivakasi, Tamil Nadu as a sample area and reason for chosen this area is Sivakasi is one of the largest printing industrial areas in India. There are various employees working in printing Industry as a permanent and contract basis among that the study collected the data from 150 respondents out of which we got 102 valid respondents.

### Results & Discussions Percentage Analysis

In the industry, 62% of respondents are blue collar employees, while 40% are white collar workers. Approximately 85% of those polled are men, whereas 15% are women. It is evident that the corporation employed a greater number of males than women. Approximately 87.5% of those polled are between the ages of 21 and 37. The majority of employees are young adults, with the baby boomers being the minority. Approximately 60% of those polled are graduates. The majority of employees at this level have a graduate degree, with the fewest having a high school diploma. About half are married, while the other half are single. The marital situation is in balance.

Approximately 72.5% of responders have 0-5 years of total experience. It should be emphasized that the majority of the staff have less than 5 years of experience. As a result, the corporation may take steps to involve this group in making discretionary efforts toward accomplishing the Industrial objective. Around 47.5% of respondents earn less than \$10,000 and 47.5% earn between \$10,000 and \$20,000 per year. It should be mentioned that the majority of employees at this level earn less than Rs.10,000 and between Rs.20,000 and Rs.30,000. It is difficult to survey in a city and support a family on this salary. About 53.2% of those polled are men, while 46.8% are women. It is evident that the corporation employed a greater number of males than women.

46.8% of those polled are between the ages of 21 and 37. The majority of employees are young adults, with the baby boomers being the minority. About 53.2% of those polled are educated below the 10th grade level. The majority of the 62 responders had less than a high school diploma, and graduates are in the minority. Approximately 79% are married. The majority of married employees are young and middle-aged people. Approximately 46.8% of respondents have 0-5 years of total experience. It should be highlighted that the majority of the staff have less than five years of experience. As a result, the industry can take initiatives to involve this group in making discretionary efforts to achieve Industry goals.

### Chi Square Test

There is no difference in the respondents' opinions about the chance to learn and progress in the industry based on their experience level. There is no difference in the respondent's views on how all employees in the industry of diverse genders should be treated. There is no difference in the responses of respondents of different genders about their knowledge of their function in the industry.

There is no difference in the respondents' opinions about the chance to learn and progress in the industry based on their experience level. There is no difference in the respondent's views on how all employees in the industry of diverse genders should be treated. There is no difference in the responses of respondents of different genders about their knowledge of their function in the industry.

There is no difference in the respondent's perceptions about adequate systems for dealing with employee problems in the industry based on gender. There is a difference in respondents' opinions on adequate arrangements for dealing with employee problems in the industry, which is linked to the respondents' gender differences. There is no difference in respondents' attitudes on the ability to learn and progress in the industry based on their experience level. There is no difference in the respondent's views on how all employees in the industry of diverse genders should be treated. There is no difference in the responses from respondents of different genders about their knowledge of their function in the industry.

### Correlation Analysis

There is no correlation between respondents' opinions on the desire to leave the industry and their income level. There is no correlation between the respondents' opinions on the desire to leave the industry and their amount of experience in the industry. There is no correlation between respondents' attitudes on the desire to leave the industry and their age level.

There is a correlation between respondents' attitudes on the desire to leave the industry and their age level. There is a correlation between the respondents' attitudes on the intention to leave the industry and their amount of experience in the industry. There is no correlation between respondents' opinions on the desire to leave the industry and their income level.

Employees' intentions to resign decreases as their experience grow. This demonstrates that employees with less experience are more likely to leave the organization. The company's turnover rate can be reduced if it concentrates on less experienced staff. This demonstrates that younger employees (youngsters) are more likely to leave the organization. If the organization concentrates on those employees, the attrition rate can be reduced. Many employees believe they are not treated fairly. As a result, management must take steps to promote workplace equality. Many employees are unaware of their responsibilities in the industry. As a result, management may insist on HR describing the workers' tasks and responsibilities to them personally during the induction phase, so that management can have an efficient work environment. Many employees believe that the industry provides more opportunity for them to learn and flourish. This is a good indicator that the industry will grow in the future. Employee equality in the workplace is more than simply a moral obligation. It guarantees that the firm grows to its full potential. When an employee

is treated unjustly, it leads to lower employee morale, which leads to lower employee productivity, which leads to high turnover. This might be avoided by eliminating bias toward one employee over another.

### Conclusion

Employee Engagement is attracting a great deal of interest from employee across numerous sectors. In some respects, it is an aspiration of employers to find ways to increase employee motivation and to win more commitment to the job and the industry. Employee Engagement is about more than having happy employees and it goes far beyond job satisfaction. Therefore, an engaged employee will have an emotional commitment towards the industry and its goals and this enables them give a greater amount of discretionary effort at their work. In this study researcher aimed to study the level of Employee Engagement in Printing Industry. The researcher did not consider any outcome variables of Employee Engagement. This would be giving scope for the future researches.

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## **Innovation Strategies for Aviation in India**

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### **Abstract**

Realizing the immense potential, the government of India introduced UDAN (Udey Desh Ka Aam Nagrik) scheme in 2017 with an aim to make India the 3rd largest aviation market by 2025. The rising traffic and a larger network base demanded IT (Information Technology) and OT (Operational Technology) infrastructure for the operators with high-quality mobile technology for an increasingly modern workforce and maximum facility. As a rapidly growing airline, Vistara is focused on delivering safe and affordable air travel along with different services including cargo, charter booking, customer booking information etc. The biggest challenges faced by the airline were high operational costs and finding an innovative solution to the in-flight information papers carried by pilots weighing 18 kilos that include critical information like Surface Weathers, Flight Plans, Icing, Route Briefings, Flight Logs etc. This process increased the chances of human error attributing to dependency on manual calculations and no real-time information. Today's world is moving toward the era of innovation and how much technology is advanced adds more uniqueness to the product/service.

### **Introduction**

The Indian Aviation sector is poised to take off and soar high in an unprecedented manner. Indeed, the Aviation sector in India has come a long way from the humble beginnings in the pre-independence era where the legendary JRD Tata, pioneered the industry and introduced a small turboprop plane as the first connection to the outside world by air.

Now, the Aviation sector is a stage where it boasts of world-class airports, best in the breed airlines, and an enviable safety record, though minor skirmishes are reported often. From being a preserve of the rich to the present where the Aam Admi is the focus of the airline industry, the aviation sector mirrors the development and evolution of the Indian Economy over the decades.

Added to this is the fact that successive Indian Governments since the 1990s when the Indian Economy was liberalized have actively encouraged the development of the sector by providing subsidies and establishing world-class airports, though at a tardy pace given the inherent complexities of the Indian political and socioeconomic landscape.

**Thus, it can be said that the Indian Aviation sector is both poised to take off as far as the future is concerned and is soaring high as far as the present is concerned.**

### **Factors Dragging the Sector Down**



Having said that, there are a few bottlenecks or chokepoints that have stymied the development and the growth of the Indian Aviation Sector. Prominent among these is the capacity addition in the airports across India where the present infrastructure is unable to support the ambitious expansion plans of the various airlines.

Indeed, even after building gleaming and glittering airports in all the Metros under the PPP or the Public Private Partnership model, airlines are routinely denied landing rights and parking bays for want of capacity.

Further, the fact that the blistering pace of growth in the sector means that despite adding capacity in a quick manner, airports are unable to handle the ever-increasing load of footfalls in terms of arrivals and departures.

Though the Indian Government has put in place policies such as the UDAAN Scheme, the Regional Connectivity Scheme, and various others aimed at persuading and incentivizing airlines to connect to remote locations, the pathetic state of the infrastructure in such areas means that such schemes would take time to fructify.

Of course, the massive push to develop Tier 2 and Tier 3 airports is clearly a right step in the direction of broadening the base of the infrastructure pyramid so that flyers from rural areas can benefit as well.

However, this push is succeeding in states where the state governments are actively encouraging such developments whereas in other regions, the initiative is lagging the former.

### **Research Methodology**

The study was conducted from the secondary sources of data.

### **Conclusion**

It goes without saying that there are some measures that would minimize the path ahead for the sector. To start with, the present agreement on not having two airports within 150 Kilometers of each other can be reviewed especially where Bangalore and Hyderabad are concerned.

In both these cities, the airports in operation earlier have been mothballed despite massive investments in them mainly because the new airports and their owners specified the agreement on distance.

By reopening the old airports, significant capacity can be added thereby both lessening the load on the new airports as well as furthering the growth. To conclude, it can be said that it is a mixed bag as far as the Indian Aviation Sector is concerned wherein it is soaring high but also faces turbulence ahead.

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## **How Far Is MSMEs In Implementing Data Driven Decisions for Business Performance Management**

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## Abstract

Business Intelligence (BI) refers to the application of technology and practices that make way for collecting, analyzing and displaying business information to enable a company to do better decision-making.

Effective data analysis can become a competitive advantage for any business with the right insights and deployment. Contrary to popular perception, establishing a compelling data universe is not only relevant to large-scale firms but also to small and medium-sized companies. Business Intelligence (BI) refers to the application of technology, strategies, and practices that make way for collecting, analyzing, incorporating, and displaying business information that allows a company to have better decision-making in the business.

## Introduction

Data is the new fuel. This applies not only to big data companies but also to small and medium enterprises (micro, small and medium enterprises) as they can now take advantage of Data Science. MSMEs face many challenges. Most MSMEs are founded on individual entrepreneurship and vision with little capital. Many of them are engaged in contract manufacturing and services.

A problem seen through many businesses in MSME is that they look forward to making profit as their primary goal, rather than brand building and customer trust building. It's clearly visible that MSME sector is behind the data curve but it's still not too late for them to apply these methods in their business. Small businesses may have just limited resources, but the good news is that they don't realize that they too generate a humongous amount of data in form of payments, credit sales or even as reminders given to clients. One of the use cases where data science can be effectively used in MSMEs (though applicable for other sectors as well) is use of AI. AI has left a big impact in positively improving the Manufacturing Sector.

Data science tools proved to be revolutionary for manufacturing since it helped in improving value chain management and making best use of resources. Apart from this, it also helped to predict the hot selling products, hence serving for better logistics management and not disappointing customer by having a shortage for the product. We will dive deeper as to see how Data Science helps to improve business for small manufacturers and contractors in Manufacturing sector. A critical aspect for any manufacturing business in MSME sector is their product. Customers trust companies through their products, and this is where Data Science can prove to be a turning point for these businesses. The AI and data management tools see to it that the product is made after a proper strategy that involves modelling to decision making to customer feedback to new idea generation. It also sees the market competition before launching the new product. Hence, it makes it clear to put customers' needs and demands as its priority. Once the product is ready, the next step any business does is try to forecast its sales so as to avoid any future problems. Moreover, Data Science tools may help businesses with this challenge as they make sure that data is being used to its full potential. Apart from forecasting sales, they even make use of predictive analysis from an early stage to ensure and prevent any hindrance for future opportunities.

## Background Study

Following the advances in smart technologies, researchers have started to show an increasing interest in big data analytics in operation and supply chain management. Various studies have investigated the effects of these technologies in operational performance of manufacturing systems (Ahuett-Garza & Kurfess, 2018; Akter et al., 2020; Belhadi et al., 2019, 2020; Dubey et al., 2020; Fahmideh & Beydoun, 2019; Gu et al., 2021; Kamble et al., 2020; Wamba et al., 2020; Yadav et al., 2020; Yadegaridehkordi et al., 2018). Many other studies have analysed the role of big data and big data analytics in supply chain management (Arunachalam et al., 2018; Chehbi-Gamoura et al., 2020; Hazen et al., 2018; Liu & Yi, 2018; Mishra et al., 2018; Wamba et al., 2018). All of these studies have demonstrated that use of big data analytics positively affects operation and/or supply chain management by leading improvements in system performance.

However, these studies have methodologically presented empirical investigations, case studies or review and bibliometric analysis; there is a lack of proposing models by the implementation of big data analytics techniques to a specific context or problem in operations and supply chain management. This study specifically focuses on quality management, not only since it is one of the most important contexts in operations and supply chain management literature but also since quality improvement programs require huge data in order to solve the related quality problem. Due to increased market pressure, new quality management systems are required in manufacturing ecosystems for MSMEs (Lee et al., 2019). With the developments in data management tools, big data analytics have gained importance for quality management and improvement in manufacturing. Business intelligence can help MSMEs reduce risk by better information on the expected demand cycle, customer feedback, and gaps in the market. According to a report by 360Suite, the global BI adoption rate stands at 26%. A 2019 report by Grand View Research claims that 46% of small businesses use business intelligence features like virtual networking as an integral part of their business strategy. The primary role of BI is to extract critical insights from a mountain of data and convert them into actionable business information. Small and medium-sized companies can utilise this data to make strategic decisions, improve operational efficiency, and boost productivity. Small and medium-sized businesses operate on a tight budget, so there is little scope for slip-ups and expensive buys. Opting for a robust business intelligence platform is critical for an MSME's success that helps generate actionable insights

**Here is how BI can improve the performance of an MSME Business:** Increased cost-efficiency  
Business intelligence helps a business discover the spend optimisation and allocation. With a clear picture of department-wise spending, a business can find the areas where it can save on costs. In other words, a company can spend the available resources effectively in the early stage of the business using business intelligence.

**Better revenue management in less time**

As most MSMEs are running against time in the early stage of the business, a business intelligence platform allows for a better analysis of the time spent on each activity. These derived insights help increase revenue and meet deadlines.

### **Streamlines daily operations**

Many MSMEs choose to cut corners or make decisions hastily without a BI platform. With the right insights, an MSME can streamline business operations and discover sources to increase the revenue and profitability of the business.

### **Better customer experience**

Irrespective of the industry, an MSME business can improve the customer experience using technologies like predictive intelligence. Automated insights generated using a BI platform can help improve customer experience and satisfaction scores.

### **Competitor analysis**

A robust BI platform can help businesses decode competitor strategies and improve product intelligence. It helps keep a tab on the industry trends and actions of the competition.

### **Suggestion**

An MSME business can reduce the time, effort, and resources involved in operations with the right business intelligence platform. Innovative MSMEs use business intelligence to gain maximum traction and win more significant market share in a competitive landscape. Entrepreneurs can use business intelligence to ascertain the best possible roadmap to building a profitable company without wasting resources on guesswork.

### **Conclusion**

To sum it up, Data is the most powerful weapon today if used correctly. So, all businesses, whether it be small local retail store or a medium scale contract manufacturing entity, should seek to imbibe use of technology to build and grow business.

The recent experience of Covid and the general lockdown conditions the world experienced gave rise to a very interesting observations: companies those used technology, those companies did exceedingly well and the others who did not suffered losses and got shaken up. The data can be used as companies leverage with developing a correct big data strategy, as not adapting to the big data revolution might leave those businesses at a disadvantage. The AI trend will be high yielding for MSME's if they have a vision and patience to achieve long-term success.

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## **A Study on The Implementation of Iot with the TruckRacking Systems**

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### **Abstract**

As the number of trucks grows every day, there are so many accidents which is due to the high speed of the truck with much weight. To solve this kind of situation Intelligent Transportation Systems has been emerged to give a solution to limit accidents, especially in hill areas, with the help of the Internet of Things (IoT), Wireless Sensor Networks (WSNs), and Weight Transducer. This transducer converts an input mechanical load, weight, and pressure into an electrical output signal. WSNs are used to detect the vehicle's motion. ITS will help to detect the speed and track

the truck using GPS sensors. This paper resolves the limitation of accidents and tracks the speed of the truck based on the weight that truck carries.

### **Introduction**

Numerous trucks can transport massive loads from one location to another in a single day. The trucks may pass through various locations as they are moving. A probability of an accident exists. Real-time speed tracking for trucks is not offered by any service provider, including those who supply tracking systems. Similar to this, no vehicle business offers a tracking system to find a truck based on its weight. Since we anticipate that the cost of the vehicle would be significant, the tracking method will be beneficial to them.

To address these issues, we research a technique utilizing the Internet of Things and Wireless Sensor Networks. Specifically, we use the WSNs module to determine the precise speed of the trucks and the GPS and GSM modules to send the data via GPRS to an open-source cloud. We may transmit data to the Google map and display the position and speed of the data in our application by using cloud API services. If a truck system is implemented, the vehicle can transmit its position and speed while in motion. Our system pinpoints the truck's exact location and sends it to our application. Our tracking Android app allows users to find the whereabouts. As part of our investigation, we've additionally deployed a path feature. By clicking the path button on our application, it will display the velocity of automobile want to travel in step with the truck weight. Similarly, on this manner our monitoring system feature.

### **Objectives**

- To examine the information on accidents and the accidental area
- To learn more about the device's speed tracking components.
- To calculate speed in the sloping region
- To Improve the tracking system using WSNs

### **Methodology**

#### **Primary Data**

Primary data would be collected through the survey in highway and safety departments. It will also be collected through the method of careful observation and interaction within nearby area people. The questionnaires are based on open ended and close ended questionnaires.

#### **Secondary Data**

The secondary data would be collected through the careful study of the accounts of the company and some of the basic information from the before related paper.

### **Review of literature**

- As the Internet of Things and its capabilities grow, research on real-time vehicle tracking and speed monitoring devices has accelerated.
- A proposed tracking and control system that makes use of GPS technology is comprised of three parts: a tracking portion, a monitoring part, and a control part.
- In order to increase productivity and efficiency, the logistics and supply chain network's complex collection of entities requires coordination, collaboration, and



information sharing.

### **Conclusion**

According to the study's findings, accidents caused by trucks travelling too quickly while carrying a heavy cargo have decreased. However, with the use of a weight transducer, a truck's weight may be determined, fed into a speedometer, and used to establish a thumb rule for vehicles based on the presence of highways and muddy areas. The owner receives a message with the vehicle's current speed. When the speed threshold is surpassed, the new idea of sending a warning message to a pre-defined mobile number of functions as an instant alarm mechanism for the owner, parent, or third party in case of over speeding. The driver is likewise warned in this way. The future work scope involves incorporating unique elements into the current model, similar to how accidents or urgent medical conditions alert emergency agencies. Only authorized people can track the automobiles, according to a different strategy in this study. Following a comparison of the proposed system's findings with those from other systems, we discovered that the proposed system performed better in terms of data size and power consumption, particularly in severe workloads.

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### **Impact of Covid 19 On Aviation, Logistics and Supply Chain Sectors**

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### **Abstract**

Pandemics like COVID-19 are thankfully rare; however, the impact on the aerospace, logistic and supply chain industries is large, especially for small-to-midsize suppliers. The current COVID-19 crisis hits an already challenged supplier landscape that - especially in the North American market - is stressed by the Boeing 737 Max situation. The effect is a reduction in demand, supply interruptions, financial pressure and workforce impairment resulting in one of the largest global shocks in the industry's history. With the crisis in full swing and countries in shut down mode, the economic rebound scenarios are uncertain. A quick recovery becomes unlikely by the day. The shock of COVID-19 is impacting global GDP and presents a significant challenge to



aerospace OEM and suppliers' revenue, EBIT and cash flow. The COVID-19-induced lockdown measures have disrupted transport mobility severely, which also restricted international trade and added fuel to the fire in the logistics sector. Restrictions on transport freights have slowed down the mobility of goods sharply. Lockdown restrictions have brought first- and last-mile transportation and intermodal movement of goods to a complete halt for an initial period, and were eased later. These restrictions have caused a sharp reduction in vessel capacity and equipment shortages and impacted both domestic and external trade substantially. India's air freight volume has been expected to contract by 17–20% during 2020–2021 due to the government-imposed capacity restrictions to reduce the impact of the COVID-19 pandemic (ICRA, 2020). shows that air freight volume had recovered faster since April 2020, even there was a decline of 45% in the air freight volumes from April to September 2020 compared to the corresponding previous period (ICRA, 2020).

### Introduction

UNICEF provides an overview of the current and anticipated near term impact COVID-19 is having on UNICEF's supply chains for country programmers. The focus is on logistics and key markets for strategic essential supplies for women, children and young people that make up the majority of UNICEF's procurement 'footprint' (by procurement value and volume). Accordingly, it covers health related products, notably non-COVID-19 vaccines, safe injection equipment (SIE), cold chain equipment (CCE), medicines, nutrition, mosquito nets, education supplies, as well as products related to water and sanitation. UNICEF issues separate updates on COVID-19 specific supplies and maintains a COVID-19 Vaccine Market Dashboard as a public resource for the latest information on the world's COVID-19 vaccine market. as of September 2021 the total number of confirmed COVID-19 cases globally has surpassed 230 million affecting virtually all countries, regions, and territories. Just five countries, the United States (US), India, Brazil, The United Kingdom, and Russia account for nearly 50 per cent of all confirmed cases since the onset of the pandemic, with over 4, 7 million COVID-19-related deaths having been reported globally. The World Health Organization (WHO) publishes the latest epidemiological updates accessible. A report issued by WHO, on behalf of the Independent Accountability Panel (IAP) for Every Woman, Every Child, Every Adolescent presents a very grim picture of the effects the COVID-19 pandemic is having on the status of women, children and adolescent health. The progress made to date in reaching women, children, and adolescent health targets under the sustainable development goals (SDGs) by 2030 were already behind target before the outbreak of COVID-19. However, the pandemic has reversed many of the gains made, as countries have coped with the pandemic by diverting already limited.

### Purpose and Plan of The Study

The purpose of this research study is to explore the impacts of COVID-19 on the demands, lead times and work conditions of an aviation firm which offers parts and maintenance services to both the commercial and military sectors. To achieve this, two research questions were answered; The first one dealt with the impact of COVID-19 on the demand and

leads times of an aviation company while the second questions assess the work conditions and the steps and measures taken for these pandemic related improvements.

### **Objectives**

1. To have a clear idea of what are the impacts created by covid 19 in the aviation, logistics, and supply chain industries.
2. To know the exact rate of loss occurred due to pandemic lockdown.
3. To have a clear of root cause of the loss.
4. To suggest some ideas which would help to overcome this crisis.

### **Exact Impact of Covid 19 On Aviation Industries**

Air transport represents a small share of GDP but is closely linked to the activities of other sectors, especially airports and aircraft manufacturing – collectively considered here as the “aviation industry”. The aviation industry is a key enabler of many other economic activities. The dramatic drop in demand for passenger air transport (and freight, to a lesser extent) due to the COVID-19 pandemic and containment measures is threatening the viability of many firms in both the air transport sector and the rest of the aviation industry, with many jobs at stake. While the aviation industry has often been a target of government policies, the COVID-19 crisis has precipitated a new suite of loans, loan guarantees, wage subsidies and equity injections, raising concerns about competition and the efficient use of public resources. To promote a sustainable trajectory for the aviation industry, government policies should priorities sector-wide measures and competition

### **Loss In Aviation Industries Due to Covid 19**

“The magnitude of the COVID-19 crisis for airlines is enormous. Over the 2020-2022 period total losses could top \$200 billion. To survive airlines have dramatically cut costs and adapted their business to whatever opportunities were available. That will see the \$137.7 billion loss of 2020 reduce to \$52 billion this year. And that will further reduce to \$12 billion in 2022. We are well past the deepest point of the crisis. While serious issues remain, the path to recovery is coming into view. Aviation is demonstrating its resilience yet again,” said Willie Walsh, IATA’s Director General.

The International Air Transport Association (IATA) announced its latest outlook for airline industry financial performance showing improved results amid the continuing COVID-19 crisis:

Net industry losses are expected to reduce to \$11.6 billion in 2022 after a \$51.8 billion loss in 2021 (worsened from the \$47.7 billion loss estimated in April). Net 2020 loss estimates have been revised to \$137.7 billion (from \$126.4 billion). Adding these up, total industry losses in 2020-2022 are expected to reach \$201 billion.

Demand (measured in RPKs) is expected to stand at 40% of 2019 levels for 2021, rising to 61% in 2022.

Total passenger numbers are expected to reach 2.3 billion in 2021. This will grow to 3.4 billion in 2022 which is similar to 2014 levels and significantly below the 4.5 billion travelers of 2019.

Robust demand for air cargo is expected to continue with 2021 demand at 7.9% above 2019 levels, growing to 13.2% above 2019 levels for 2022.

Aviation is resilient and resourceful, but the scale of this crisis needs solutions that only governments can provide. Financial support was a lifeline for many airlines during the crisis. Much of that—approximately \$110 billion— is in the form of support that needs to be paid back. Combined with commercial borrowing the industry is now highly leveraged. We don't want handouts, but wage support measures to retain critical skills may be necessary for some airlines until governments enable international travel at scale. And regulatory alleviations—like continued slot waivers while international traffic recovers—will be needed well into 2022,” said Walsh. “People have not lost their desire to travel as we see in solid domestic market resilience. But they are being held back from international travel by restrictions, uncertainty and complexity. More governments are seeing vaccinations as a way out of this crisis.

We fully agree that vaccinated people should not have their freedom of movement limited in any way. In fact, the freedom to travel is a good incentive for more people to be vaccinated. Governments must work together and do everything in their power to ensure that vaccines are available to anybody who wants them,” Response To The Crisis Looking ahead, policy interventions should foster the resilience and sustainability of the aviation industry Governments have to strike the balance between support to the aviation industry and the need to preserve competition, in particular when considering firm-specific measures Government interventions can have ambiguous effects on competition.

On the one hand, the failure of a small number of companies could significantly lower competition while their rescue can prevent that from happening. On the other hand, equity injections may put at risk the ‘competitive neutrality’ of the state and affect the access of foreign companies to the domestic market. Good governance of state-owned enterprises is essential to avoid negative effects on competition, and also to promote the efficiency of the controlled firms. Measures to foster competition should in particular focus on lowering the costs of entry, for instance by reserving relinquished airport slots for new entrants.

If not well-designed, government interventions can slow business dynamics and ultimately productivity growth. If they go beyond sector-wide interventions and provide firm-specific support, governments should only target solvent and productive companies. As in any other industry, governments should avoid supporting non-viable companies; rather, they should allow exit and promote resource reallocation. In practice this calls for sector-wide measures and boosting competition.

The risk that government interventions negatively affect business dynamics and productivity may be particularly acute for air transport, given the high dispersion of profitability and productivity across firms in the sector. With demand likely to remain muted in the medium run, the sector has started to adapt and downsize. In this context, governments should enable downsizing rather than counter it, being particularly careful to foster restructuring or exit of the least efficient firms while continuing to target an efficient use of public resources.

In the process of restructuring, government need to smoothen the transition for displaced workers.

The results show that the financial performance of logistic firms was significantly higher during 2020. Overall, the country-wise findings corroborated with the main results and the financial performance of 14 countries' logistic firms out of 20 ones analyzed has been significantly elevated, during the pandemic period. However, this paper has found out a negative financial performance of the logistics firms during the COVID-19 period in six countries (Germany, Korea, Russia, Mexico, Saudi Arabia and the UK), which support the second proposition.

As the importance of logistics services during the pandemic period is relevant, this study may provide significant insights because the logistics firms play a crucial role by anticipating to ensure the supply of essential items such as food, medicine, then supporting for the continuity of supply chains. The view of finance impacts during the pandemic may provide insightful perspectives for logistics companies, allowing them to understand those impacts and better prepare for likely disruption events such COVID-19 pandemic. the impact of COVID-19 was first felt in China due to the role it plays in global manufacturing (with Wuhan, the epicenter of the pandemic, playing a particularly significant role—more than 200 of Fortune Global 500 Firms have a presence there). China is also a major consumer of global commodities and agricultural products

### **Loss in logistics industries due to covid 19**

**Ocean freight:** Total container volumes handled at Chinese ports dropped by 10.1 percent in the first months of 2020. Agility Logistics reports considerable constraints to ocean freight around the world, impacting both key exporters, like Brazil, China, India, and Mexico, as well as importers like the European Union. According to DHL, weak demand will continue to affect routes between Asia and Europe, the United States, and Latin America. Consequently, additional blank sailings are expected in the coming weeks

Supply chain disruptions and the lockdowns are already affecting logistics companies. Operational constraints are expected to lead to delivery delays, congestion, and higher freight rates. However, not all segments will be impacted equally—companies that serve e-commerce are seeing increased activity as consumers opt for online shopping of essentials, while those that serve other sectors (such as auto and consumer goods) will see a downturn. One mitigant: record-low fuel prices should provide some relief to transport operators. Overall, the uncertainty will exert downward pressure on revenues.

### **Response To the Crisis**

For the most part, governments have responded to the crisis by designating ports, shipping, and trucking services as essential—and thereby exempt from lockdown measures. For example, the Indian government exempted the movement of cargo through ports, supply chains, and the transport of essential commodities from lockdown rules. Although many airports around the world are closed to passenger flights, most are still open to cargo, which can be essential to the COVID-19 response (for example, to transport medical supplies). Closer collaboration between

governments and third-party logistics companies has also been necessary to address supply chain bottlenecks and facilitate clearances. Third-party logistics companies have adopted a range of responses to these uncertainties, including:

- a. new safety protocols: To protect their staff's health, some companies have introduced new protocols on social distancing at warehouses, disinfecting work areas, or providing protective gear, while giving staff unlimited unpaid time off. However, these efforts, which come at a higher financial cost, cannot guarantee protection against outbreaks in confined warehouses.
- b. Alternative modes of transport: Many companies are using creative alternatives to their go-to transport modes. Since the reduction of passenger flights has reduced airplane belly cargo capacity, companies such as DHL have used charter flights to transport shipments to and from China. Airlines are also repurposing passenger aircraft for cargo. Some observers are even forecasting a boom for the China-Europe rail as 60 percent of the air freight capacity between China-Europe has vanished.
- c. Adapting service offerings to current demand and safety protocols: Some larger players have been playing an important role in delivering medical supplies. For example, UPS provided free air transport for two million masks and protective gear to Wuhan in February. Companies are also adapting to demand. Warehouses and retailers are focusing on grocery deliveries since demand is high for essential products, while companies in the last-mile segment are offering no-contact delivery options.

### **Impact On Supply Chain industries**

The COVID-19 pandemic has posed significant challenges for supply chains globally. Multiple national lockdowns continue to slow or even temporarily stop the flow of raw materials and finished goods, disrupting manufacturing as a result. However, the pandemic has not necessarily created any new challenges for supply chains. In some areas, it brought to light previously unseen vulnerabilities, and of course, many organizations have suffered staff shortages and losses due to COVID-19. But overall, it has accelerated and magnified problems that already existed in the supply chain.

The following are some findings from a survey that Ernst & Young LLP (EY US) conducted in late 2020. The respondents were 200 senior-level supply chain executives at organizations across many sectors, including consumer products, retail, life sciences, industrial products, automotive, and high-tech companies in the United States with over US\$1b in revenues. In the aftermath of severe disruption from the COVID-19 pandemic, the survey found that enterprises in the US plan to shake up their supply chain strategies to become more resilient, collaborative, and networked with customers, suppliers, and other stakeholders. To do that, they will increase investment in supply chain technologies like AI and robotic process automation while retraining workers.

### **Response to the Crisis**

Design a supply chain organization that will fit the new digital and autonomous-focused era.



The supply chain of the future will need to be agile, flexible, efficient, resilient and digitally networked for improved visibility. Organizations, therefore, should focus on five priorities for recovery and beyond.

**1. Reimagine the strategic architecture of your supply chain**

Rapidly redefine your supply chain strategy and alter global trade flows, considering new trade agreements, country incentives and omnichannel acceleration.

Reimagine your supply chain operating model — what work should get done locally, regionally and globally, including warehouses and manufacturing sites. There are considerable tax implications here, and a new model can also help you prepare for future disruption.

**2. Build transparency and resiliency**

From the research, we see that 60% of executives say the pandemic has increased their supply chain's strategic importance. Accordingly, enterprises urgently need to Improve disruption response with real-time visibility and monitoring of your end-to-end supply chain, as well as performing scenario planning and simulations.

Review your supply chain footprint. Do you have alternate sources of supply established? Are you ensuring you do not have vendor or geographic concentration?

**3. Extract cash and cost from your supply chain**

Drive a step change in your supply chain cost structure and working capital profile by focusing on SKU rationalization, procurement spend reduction, logistics and warehouse optimization, and manufacturing productivity.

Reduce working capital via supply chain segmentation, refreshed inventory planning parameters and changes in payment terms.

**4. Create a competitive advantage with sustainability.**

The future is a circular economy where there is no waste in your products or manufacturing.

Explore ways to redesign and engineer new products to achieve this circular economy and monitor third-party risk with supplier sustainability assessments across tiers 1-3.

**5. Drive agility and opportunities for growth through a digital supply chain**

Work towards implementing the digital and end-to-end supply chain across planning, procurement, manufacturing and logistics. This can drive efficiencies and also open new revenue streams.

### **Conclusion**

In this research, the impact of the corona virus pandemic on aviation, logistics, and supply chain has been analyzed by using text mining techniques on newspaper articles from general and supply and logistic press. Analyzing general newspapers does not lead to a conclusive answer to the research questions; however, the results on SCN offer some indications. As far as the impact on the SC of the corona virus pandemic goes, the disruption, food, companies, and businesses are the main focus of general newspapers besides people and health issues. In SCN, the focus changes from trade, demand, logistics, and manufacturing in combination with disruption, impact, and risk toward technology, increase, and commerce and from being problem-focused toward solution-focused.



The importance of sustainable SC in both general and SCN press has been overshadowed at the beginning of the corona virus outbreak by the supply shortage and supply disruption, while after the supply recovery, sustainability is more discussed and in SCN more often discussed in combination with the SCM practices, risk, and resilience.

Some of the current research in the field of sustainable SC during COVID-19 is in line with the results of this study.

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## **Innovation Strategies for Aviation, Logistics and Supply Chain**

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### **Abstract**

An explicit strategy helps you design a system to match your specific competitive needs. Without an innovative strategy, different parts of an organization can easily wind up pursuing conflicting priorities- even if there's a clear business strategy. Innovation can help you anticipate market changes more quickly and get ahead of opportunities. As much as innovative strategies, Technology is important in our lives because it helps to deal with everyday dynamic things. Aviation is ideally positioned to support the innovation discourse and its potential impacts on new mobility. Artificial Intelligence is personalizing, optimizing and up scaling the digital interactions between airlines and passengers. Innovations in logistics have the right benefits both in times of crisis and well-being. They allow to reduce costs, better use of resources and faster response times, and hence the faster response of companies to the ever-changing market conditions. There are some ways to innovate supply chains and make them more sustainable. They are: Internet of things, smart sensor networks, business intelligence, information sharing, 3D printing, etc. Technologies are quickly developing, that bring huge opportunities for more sustainable supply chains. Improved technology has increased productivity in the supply chain, minimizing costs and errors.

### **Introduction**

Aviation is the operation and production of the aircrafts. It is the activities surrounding mechanical flights and the aircraft industry. Logistics is the process of planning and executing the sufficient transportation and storage of goods from the point of origin to the point of consumption. The goal of logistics is to meet customer requirements in a timely, cost-effective manner. A supply chain is the network of all the individuals, organizations, resources, activities and technology involved in the creation and sale of a product. A supply chain encompasses everything from the delivery of source materials from the supplier to the manufacturer through to its eventual delivery to the end users. Supply chain management (SCM) plays a major role in aviation and logistics. Supply chain in aviation industry is essential to save costs of business operations. The success of the business depends on the fact of how well a company adopts supply chain strategies. Supply chain in logistics coordinate the storage and shipping of goods and services across the supply chain.

### **Purpose And Plan of The Study**

The find out about is deliberate in the following way

### Conceptual And Operational Framework

#### Innovation in Aviation

The Future of Airline Industry 2035 study commissioned by IATA's Industry Affairs Committee aims to help airlines and other key aviation stakeholders anticipate the key risks and opportunities that their businesses could face between now and 2035. The study was carried out by School of International Futures, it looks at how the external forces-from geopolitics to technological innovation and environmental concerns-could shape aviation's future.

IATA should establish an industry-wise corporate responsibility programmed, with a focus on transparency, safety and the environment that could help OATA to drive global standards and ensure the sector remains competitive from other transport modalities. With the increasing risk of pandemics, a global approach to managing infectious disease becomes ever more important. While airlines need to be vigilant and prepared, IATA should also stress the increasingly important role that all stakeholders, particularly governments, need to play to ensure that responses are in line with WHO guidance and international health regulations. The industry should work with appropriate organizations to drive the establishment of globally harmonized standards to address biohacking. The industry should monitor proposals to extend or evolve the security cordon around airports to ensure that governments continue to be ultimately responsible for the safety of their citizens. The industry should establish core disciplines on facilitating the travel of older passengers and those with reduced mobility. An increasingly active aging population and changing attitudes to disability are likely to result in a greater need for industry to support passengers with special needs. The industry should make every effort to understand consumer attitudes in emerging markets.

#### Innovation In Logistics

Logistics have embraced digital transformation more slowly, compared to other industries. However, with the global pandemic, increase in ecommerce and decrease in offline retail, the traditional supply chain logistics activities had to change. Digital transformation is the main disruptor in the logistics industry and will account for \$1.72T in investments that are to be allocated to logistics by 2025. Innovations is inevitable for the industry to survive and thrive. Logistics Trends Radar shows that innovation in logistics will correlate with social and business trends, as well as technological advancements. Logistics companies plan to automate as much as possible, make their processes more flexible, and improve sustainability of their operations.

**Hyper Automation** is a combination of various technologies that aim to enhance logistics efficiencies. Its major goal is to create a seamless transition between various areas: sales, suppliers, planning, purchases, and distribution, while also reducing human involvement.

**Elastic Logistics** allows companies to scale the supply chain operations with more efficiency. Some of the most common challenges this trend tackles are underutilization of vehicles, warehousing limitations, and overstocking.

**Green Logistics** is often called as an eco-logistics. This trend refers to a variety of measures and policies set to reduce the environmental impact on transportation, warehousing, and other logistic

activities. The main goal is to coordinate all the activities and have them implemented in a way that benefits the economy, the environment and the society. Among the major forces that drive this trend are high dependency on fossil fuels, transport logistics impact of urban traffic, carbon footprint, energy- guzzling warehouses that demand 24/7 human involvement, and much more.

### **Tech Trends That Power Innovation In Logistics**

As an industry that was one of the most resistant to change, logistics has a lot of catching up to do. According to recent research, the top five most promising technologies that are boosting innovation in logistics are IoT, AI, robotics, warehouse automation, and Blockchain. **Internet of things (IoT)** is a huge thing in the digital world. It helps the companies enhance the visibility of their supply chains. Some companies fit their fleet with sensors to achieve real-time tracking updates on shipment and delivery. They can also improve the location and route management. In warehouses, IoT solutions can improve visibility into inventory management, storage conditions, and predictive maintenance. With an introduction of 5G, this tech trend seems to be the most promising.

**Artificial Intelligence (AI)** is finding strong adoption within the industry. While implemented properly, AI helps companies to improve the operation's functionality, find the possible problem, and offer solutions. According to research, AI adoption in logistics can increase companies' profits by up 5-10% a year. Market leaders raise the investments in AI technologies for saving money and time in the future.

### **Innovation in Supply Chain**

**On demand Warehousing** part of what's considered the shared economy, is a supply chain innovation that addresses a common pain point — in this case, companies that need additional warehouse space temporarily but don't want to take on the operating costs of opening a new warehouse facility. To solve this challenge, companies like Flexed connect companies in need of warehouse space with businesses that have space available.

**Collaborative mobile robots** are the future of supply chain automation, as they offer greater flexibility and scalability compared to traditional warehouse automation and innovative supply chain solutions, increasing order picking efficiency and improving accuracy by guiding associates through tasks. By optimizing picking routes in real- time, collaborative mobile robots like 6 River Systems' Chuck reduce unnecessary walking and improve warehouse productivity. Much like on-demand warehousing makes it possible to secure additional warehouse space as needed without infrastructure investments.

**Blockchain** is a permanent ledger of transactions that can improve transparency, reliability and efficiency in supply chains. While the concept of blockchain for the supply chain is still in development, it holds promise for all industries. The automotive industry could use blockchain to track parts and identify counterfeits. Lab simulations show that blockchain could handle more than seven billion unique serial numbers and 1,500 transactions per second.

### **Conclusion**

“Innovation takes birth in sync with the evolution of customer's expectations and demands or vice versa. Either way, organizations around the world have to continually innovate

themselves and keep up with the people's wants. The failure to do so or being indifferent to your customer's need will make your competitors win. And then suddenly, customers become indifferent to you-a high-risk gamble to play at." – Ketan Kapoor, Co-founder of Mercer-Mettl

Innovation is one of the key elements for the development of an industry and even the nation as a whole. As the world becomes technically advanced, it is significant for a company or an industry to innovate new ideas to keep up with the growth of other industries and nations. The world faced a huge havoc caused by covid 19, whose impact still affects various industries and firms. Few of the which are the Aviation, Logistics and Supply Chain industries. As part of the recovery, the stated industries have been taking various required measures to revive. Advanced ideas and technologies have been assisting the industries for its development.

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## **A Study on Effective Materials Handling System Using Agvs and Iot with Reference to Small Medium Enterprises**

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### **Abstract**

To improve the small or medium enterprises (SMEs) significant impacts in material handling equipment using Automated Guided Vehicles (AGVs) – a effective receiving, storing and handling of goods and materials has become the center of warehouse activities it requires safety regulations and proper handling of goods and materials – to reduce the cost and time – improving the warehouse efficiency layout among SMEs with IoT, RFID, RFID tag and GPS.

### **Introduction**

Material handling equipment (MHE) is used for the movement, storage, protection of materials within the warehouse. The principles of material handling include planning, system flow and material flow. AGVs are portable machines that navigate themselves through floor stickers, radio waves, vision cameras, magnets or lasers. It is used within the warehouse to transport raw materials, work-in-progress and finished goods. AGVs equipped with GPS allows operators to direct vehicles with utmost precision to pick up and drop.

AGVs equipped warehouses are efficient by reducing semi-automate monotonous and time-consuming processes. It functions at a consistent speed and precision for 24/7 as it requires less human intervention.

### **Background Study**

The automated apparatus assists the workforce in performing daily warehouse operations and eliminating related wastes. It is consistent with the global agenda's Sustainable Development Goals

AMHE utilization also promotes long-term industrial development. The parallel approach to implementing AMHE is required because it allows the company to save operational time, lower overall operational costs, and provide exceptional efficiency to customers in daily operations.

Malaysian warehousing sector research enriches the existing literature on technological advancement by empirically validating variables in the logistics industry, specifically in the warehouse sector. Despite the fast-changing technological environment, the ability to be agile by being flexible, innovative, and conforming to market change is a necessary ingredient for Malaysia to become a global logistics hub. Furthermore, the findings indicate that warehouse operators should pay closer attention to the critical role of top management in fostering technological adoption.

A multi-criterion, multi-objective decision problem is how the MHE selection problem is defined in this study. the selection procedure is carried out by taking into account holistic characteristics in order to facilitate thorough decision-making. According to this viewpoint, the issue is the selection of alternatives based on several criteria and objectives in order to attain performance feasibility and economic feasibility. the contribution of MHEs should guarantee the continuity of material handling and warehouse activities, and the cost of alternatives should be proportionate to the value placed on the operator, the material, and the operations themselves. Equipment can be used to lessen and occasionally replace labor whenever it is technically and financially feasible to do so. physical handling of the material The majority of currently used material handling technology is only semi-automated because certain operations, including loading and unloading, require a human operator. Although ongoing developments in sensing, artificial intelligence, and robotics have made it possible to fully automate an increasing number of handling chores, driving that are difficult and/or too expensive to fully automate. a poor The cost of a median moving machine operator to a company, including benefits, is \$45,432 per year. This cost can be used as a guide to determine how much can be spent on automated equipment that would replace one material handler.

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The cost of a median moving machine operator to a company, including benefits, is \$45,432 per year. This cost can be used as a guide to determine how much can be spent on automated equipment that would replace one material handler.

A corporation should be prepared to spend up to buy automated equipment to replace one worker, assuming a real interest rate of 1.7% and a service life of 5 years for the equipment with no salvage value. Automated equipment is frequently less adaptable than a human operator, both in terms of its inability to perform a given activity as well as a human and its inability to be as quickly redeployed to perform other duties as requirements change



### Suggestion and Conclusion

Due to the error-prone inventory management and other order fulfilment processes, manual methods might not be more productive. It takes a lot of time, too. There are clear limitations to manual solutions when it comes to storage space optimization. For tasks that aren't repetitive or predictable, a manual material handling method is preferable. Because they are not required to operate sophisticated machinery, your employees might not need technical expertise. They do, however, require safety instruction. A major worry for manual material handling systems is the improper handling of big loads and the accidents and fatalities that occur from these mistakes. You will mostly need to rely on your employees to lift, transport, push, pull, store, and retrieve commodities and products while using manual material handling. AGVs with RFID, IOT and GPS can improve the materials handling by reducing the cost, time which does not require re-handling of the materials in, sees lowering the losses incurred due to material handling equipment.

In future warehouses will be more automated with sensors for condition monitoring, communication between machines and "built-in machine learning and analytics capabilities", robots will respond more efficiently, while managers and owners will oversee the entire process without being physically present on the site.

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### International And Cross Border Freight Transportation

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### Abstract

The importance and significance of international and cross-border transportation today are the results of multiple factors that have driven the expansion of the industry, as well as welcomed innovation and technology with open arms. Whether in the past century or presently, Air transport across borders and continents was a revolutionary method to get goods from A to B in a short time. From the old ways of airmail to modern air-freight, International and cross-border freight transportation have seen a revolution with aircraft capable of carrying tons of cargo at a time and accessing remote areas hassle-free. The need and dependence for this are ever-growing and will continue in a globalized world where people are more connected than before. Land-locked areas and countries with little vegetation and agriculture depend on neighboring countries and nations with good diplomatic ties for their needs. With the help of cross-border and international freight



transportation, such countries can support their expanding populations, infrastructure, and economies.

The industry's future is bright with innovations and better safety standards by manufacturers and operators that improve the quality of this service every year. Countries demanding quicker delivery and a high amount of cargo modify their infrastructure for smoother, safer transportation.

### **Introduction**

International and cross-border freight transportation can be defined as an umbrella term for cargo transported at a stipulated rate, preferably for profit, between neighboring countries or beyond. Modern air cargo serves this exact purpose using its advanced technology and infrastructure most quickly and safely.

In this research, we shall dissect the topic and try to understand the depths of its importance in the world today and in the future with the help of multiple case studies and discussions that can conclude the same.

We will be looking at how historical events led to and shaped the industry that we see today, the current methodology used for transportation as well as new developments that could pave the way to the growth of a very lucrative market.

### **Literature Review**

#### **Freight Transportation**

Transportation of commodities, merchandise, and cargo from one station or point to another, for profit, is called freight transport.

Every year, billions and trillions of tons of cargo are transported across the world. Air cargo is one of the fastest modes in this case and has the most advantage over other modes. Perishables and gadgets are loaded in pallets and stowed in baggage compartments below the cabin in passenger aircraft or cargo hold of a freighter aircraft. The volume of cargo transported depends upon the demand of the client and the time of the year.

For example, The European Union exports winter fruits to the major hubs in every region, where it is stored and transported to the destination as per the demand. Fruits being perishables, are transported by air to preserve their freshness by the time it reaches the customer. Freight transported on Cargo planes is manufactured such that it can carry maximum weight and use the space efficiently. Boeing, one of the leading Aircraft manufacturers, has provided the industry with not one, not two, but more than seven aircraft types in its modern history, where each aircraft has at least two variants (different performance and specifications). Out of these, the biggest cargo aircraft they manufacture is the Boeing 747-8F (F for freighter variant), which has a capacity of 873.7 m cubic volume of cargo with a maximum payload exceeding 132 tones! The best part is that it can deliver this cargo across continents in about 9 hours.

Such aircraft are made by multiple manufacturers to carry cargo to the remotest of areas from Sahara to Antarctica in no time.

### **The objective of the case studies**

- Understand the need for air cargo in modern times
- Find the factors that affect the industry

- Recent and historical events that shape the industry as we see it today
- Suggest ways to make the current methods more efficient

### Suggestions

The cargo sector in the aviation industry plays a vital role in the Global supply chain and a modern connected world, yet has flaws that affect it in various aspects:

1. Issues like Customs clearances can take days, if not months, in many cases where the facility is overwhelmed by incoming cargo traffic. It perhaps requires better ways to process the cargo and increase

efficiency by increasing the number of machines to facilitate and handle the goods.

2. The key to smooth operations for any airline is good relations with other companies and countries. It develops coverage of a strong network on usual days and a friend in desperate times.

3. Airlines need to remain cost-effective and stay competitive to remain in this lucrative industry by planning well ahead and forecasting demand in the market.

4. They also need to maintain their fleet regularly to have uninterrupted operations, keep their crew trained to avoid mistakes, and minimize delays and losses.

And above all, use the infrastructure and technology smartly with the help of cargo-friendly airports rather than airports which focus on passenger movement.

### Conclusion

The study of the cargo industry in the international market, as well as regional market by us, concludes that the importance of Air cargo to deliver goods as quickly as it does is unparalleled and will remain so. Industry growth fluctuates with Daily affairs and events around the world.

The demand and reliability, however, will not slowdown with modern business models of e-commerce and the need to transport perishables by air. There are flaws like longer processing times at customs, high costs, operations affected by weather, and security lapses even after multiple levels of checks. Regions that are landlocked and not connected well with the rest of the world develop infrastructures such that it receives goods by air. The industry has come a long way from transporting Air mail to modern times where one can transport their cars and personal belongings by air and businesses to trade with the help of air cargo.

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## Strategic Responses to Changing Global Environment: An Appraisal of Scenario of Mergers & Acquisitions by and the Indian Companies.

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### Abstract

The Paper concentrates especially on Mergers, Acquisitions, and Takeovers, with particular reference to M&A (Outbound M&A) and M&A in Indian Companies (Inbound M&A), since 85% of Indian Firms are using M&A's as a core growth strategy. The Paper explores the scenario in

various sectors, as well as the nuances in these sectors and the drivers of M&A s in each of these sectors.

The impact created by changing environment of organizations, fueled by Globalization Liberalization, Technological changes and market changes have forced the organizations to make various strategic responses. These responses largely revolve around and are based on changing the portfolios, modifying organizational processes, or altering the organizational structures. These responses can therefore, be broadly classified into: (2) Portfolio related strategic responses, (2) Process related strategic responses, and (3) Structure related strategic responses.

Many Organizations are in the midst of fundamental changes in organizational designs. Pioneering and traditional companies alike are experimenting with novel organizational structures to face the fast pace of technological change, and the emergence of knowledge- based economy. These developments are collectively precipitating a move away from monolithic and rigid organizational designs which were geared for respective transactions and routine activities. The resulting impetus is towards flexible and agile organizational forms which can accommodate novelty, innovation and change.

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### **Portfolio Related Strategic Responses**

The Global response to fast changing environments by companies has been in terms of changing their portfolios: of businesses, products, markets, capital, and even business units. Some have even entered into strategic alliances or collaborations to access new technology, new products, and new markets. Some have merged, while others have acquired or taken over others to increase their market share. Many have formed joint ventures to exploit the emerging opportunities. Yet others have diversified while some divested their business units. Also, some bought their shares back while government have resorted to disinvestments in state -owned PSEs.

### **Process Related Strategic Responses**

Process related strategies look, largely, within the systems and procedures with a view to improving them, thus making significant gains. These responses take the form of improving quality, benchmarking cost management asset utilization, JIT, project management, etc. Organizations have adopted these measures to optimize.

### **Structure Related Strategic Responses**

Many organizations are in the midst of fundamental changes in organizational designs. Pioneering and traditional companies alike are experimenting with novel organizational structures to face the fast pace of technological change, and the emergence of knowledge – based economy. These developments are collectively precipitating a move away from monolithic and rigid organizational designs which were geared for respective transactions and routine activities. The

resulting impetus is towards flexible and agile organized forms which can accommodate novelty, innovation and change.

Brian Levy Global Deals Industries Leader, Partner, PwC US

‘Now is not the time to sit on the side-lines, but to reassess—even reset—M&A strategy. I expect to look back at 2022 to find the successful dealmakers of tomorrow who will be defined as those who boldly execute on their M&A goals today and overcome the current market challenges.’

The good news is that deals done during a downturn or otherwise challenging markets are often the most successful. A PwC analysis found **better returns for buyers during a downturn** and shows how deals launched during such times can achieve outsized growth. We believe that dealmakers who are bold—and strategically pursue M&A with a **strong capabilities fit**—will be best positioned to create value for the longer term. What’s more, the factors that underpinned the M&A market in the first half of the year will remain influential for deal-making in the latter half: supply chain resilience; portfolio optimization; environmental, social and governance (ESG); and, above all, the competition for badly needed technology.

#### **Win over stakeholders**

M&A volumes and values tend to rise during periods of economic growth and favorable markets, and decrease during times of uncertainty and market volatility. We saw this happen in early 2020 at the onset of the COVID-19 pandemic, and we have seen similar trends in prior economic recessions, such as the global financial crisis and the dot-com bust. It should be no surprise therefore that M&A softened during the first half of 2022. Dealmakers are facing higher costs of capital and increasing pressure on returns. And their boards and investment committees may be advocating for caution, even delays, in M&A pipelines, as rising inflation, concerns over energy supply, labor shortages and supply chain disruptions put pressure on balance sheets and put longer-term priorities, such as deals, on hold.

How can dealmakers successfully overcome stakeholder concerns and win trust to get deals done in the current environment? Consider the following approaches.

- **Build the case for M&A now:** Don’t wait until the target is identified. Advocate for a deal’s strategy aligned with strategic goals, rather than waiting to bring stakeholders on board until you are engaged on a deal. Highlight the importance and impact of pursuing M&A irrespective of the current market climate.
- **Focus on the long term:** The best leaders outperform the worst markets by seeing value beyond the short-term horizon. **Periods of rapid change create space for new ideas** and can create opportunities to present new visions for the future. Build trust with your stakeholders and generate support for your M&A strategy—one that will deliver results and successful outcomes for the long term.
- **Expand your due diligence:** There is an even greater need to perform robust due diligence—both deeper and beyond traditional areas—in order to get comfortable with the investment rationale, company projections, competitive landscape and impact of an inflationary environment.

#### **Capitalize based on the value reset**

Valuations in both public and private markets are under pressure. In particular, with the decline in stock market performance, many high-quality companies are trading at significant discounts to recent highs. With the number of public-to-private transactions in early 2022 almost 50% higher than the same period last year, many investors are already jumping into the market.

Mergers and Acquisitions have been a natural process of a business that needs restructuring to stay afloat in the market or cut down the competition. The first wave of mergers dates back to the Great Depression when J. P Morgan Chase merged US Steel with more than 700 small steel firms and Carnegie Steel for a 70% controlling stake. Today, every industry has seen billion-dollar deals that merge companies, employment structures, and the functioning of a business to increase profitability and bring a new wave of energy to the management. These mergers have not only included takeovers of new product lines but also discovered new geographical sectors for a better reach.

These mergers and acquisitions are expensive, from tech giants that merge partnering applications to streaming platforms that are trying to give a head-to-head competition for market domination. Let's look at some of the billion-dollar merger acquisitions as of 2022.

#### **TABLE 1.0 M & A SCENARIO ACROSS THE GLOBE, 2020-2021, (US \$ Billion)**

In case of overseas investment by the developing and transition countries is mainly because of India and China that are emerging as the significant players. Since 20006, there has been remarkable pick up in India's and China's share, though the shares remain moderate at 1.9% and 0.3% respectively.

As far as India and China are concerned. Happily, they are not in competition as in the case of inbound foreign direct investment. Their objectives of and destinations for overseas investment are different. Until up to a couple of years back, the news that Indian companies having acquired American- European entities was very rare. However, this scenario has taken a sudden U turn. The data Provided in Tables 1.0 to 1.2 and 2.4 are pointers towards the same. Nowadays, news of Indian Companies acquiring a foreign business are more common than other way round. Buoyant Indian Economy extra cash with Indian Corporates Government policies and newly found dynamism in Indian businessmen have all contributed to this new acquisition trend.

#### **Tale 1.1 Global Scenario of M&A Deals (2005- 2007 in and out of India**



#### **Consolidation of Tata businesses**



A year after Chandrasekaran's appointment as Tata Sons chairman, Tata Sons consolidated its various businesses in the aerospace and defense sectors under a single entity -Tata Aerospace & Defence in 2018. In 2017, CMC was merged with *Tata Consultancy Services*. In technology, the group now has three major companies--Tata Consultancy, Tata Lexis and unlisted Tata Digital. In the automobile sector, the conglomerate has three listed companies--Tata Motors, Automotive Stampings & Assemblies Ltd, and Automobile Corp. of Goa Ltd. Tata Auto Companies Systems is unlisted. Moreover, by bringing Tata Projects, Tata Consulting Engineers, Tata Realty and Infrastructure, and Tata Housing under a single umbrella, the group plans to create a larger infrastructure vertical.

### **Global chemical industry Mergers and Acquisitions 2017-2022**

Recovering from the hurdles of 2020, the chemicals industry experienced a record number of M&A transactions in 2021. Sustaining this momentum, 2022 will likely prove to be another busy year of transactions in the chemical industry. Global M&A volumes in the industry hit a 10-year low in 2020, the industry turned around and marked a 10 year high in 2021 in terms of both M&A volumes and number of transactions exceeding US\$1 billion in value.

This rebound was largely anticipated by our *2021 Global chemical industry M&A outlook*, as nearly 75% said that their companies were very likely to undertake M&A in 2021. After 2021's record high in terms of M&A volumes, will the strong M&A momentum continue in 2022 or will the pace of M&A in the chemicals industry slow? Will chemical executives largely fill their M&A appetite in 2021 or are they still hungry for more in 2022? How will the industry's continued move to sustainability shape its approach to M&A? After a record 84 transactions in 2021, will private equity's deployment of capital in the chemicals industry continue or will it moderate? Will any new sectors or geographies emerge as key M&A markets in 2022.

We will explore these questions and more in the 2022 Global chemical industry mergers and acquisitions outlook: Optimism abounds amidst competition. Deloitte surveyed 33 chemicals executives across sectors and geographies to assess current and future M&A plans. For the second consecutive year, chemical executives were nearly unanimous in their positive outlook for M&A heading into 2022.

### **Top tech mergers and acquisitions in India in 2017-2022**

Infosys has signed a definitive agreement to acquire oddity, a German digital marketing, experience, and commerce agency. In 2021, the economic optimism and availability of large capital stimulated domestic mergers and acquisitions (M&A) led by companies that liquidated non-core assets to streamline corporate structure and use cash to purchase assets, a PWC report showed. The major deals in the IT sector last year included Wipro's Capco acquisition for USD 1.5 billion and Biju's Great Learning (USD 600 million) and Epic (USD 500 million) purchases. The trend is likely to continue in 2022.

### **Reliance's stake in Adverb**

Reliance Industries Limited spent USD 132 million to pick up a 54% stake in Adverb Technologies, an Indian robotics start up. The Noida-based start-up focuses on building



automation and robotics solutions for warehouses and factories. Reliance has been already using Adverb's robotic conveyors, pick-by-voice software, and semi-automated systems in its warehouses. Adverb churns out around 10,000 robots in a calendar year, including mobile robots, sorting robots, pallets shuttle and carton shuttle. And 80% of the start-up's revenue comes from the domestic market. The robotics start up plans to use Reliance's resources to achieve its goal of becoming a billion-dollar company in the next five years by targeting the global market.

#### **HCL's majority stake in GBS & Stars chemo acquisition**

HCL Technologies has acquired a majority stake (51%) in German IT consulting firm Gesellschaft for Bank system GmbH (GBS). The remaining stake (49%) is with the largest German cooperative primary bank Deutsche Apotheker- and Reserve Bank.

Additionally, HCL has agreed to buy the Budapest-based company Stars chemo in a deal worth USD 42.5 million to strengthen its data engineering services and build a stronghold in Central and Eastern Europe. The deal is subject to regulatory clearance from the Hungarian Ministry of Innovation and Technology and is expected to be completed by March 2022. Stars chemo, founded in 2006, offers consulting, technology, and managed services in data engineering.

#### **Infosys buys Oddity**

Infosys has signed a definitive agreement to acquire oddity, a German digital marketing, experience, and commerce agency. The move will reinforce Infosys' creative, branding and experience design capabilities and demonstrates its continued commitment to co-create with clients and help them navigate their digital transformation journey.

"Using oddity's digital commerce, marketing knowledge, and meta verse-ready set-up, it easily complements Infosys' prowess in technological transformation," said Ravi Kumar S, Infosys President, in a statement. oddity has a comprehensive service portfolio comprising digital-first brand management and communication, in-house production, including virtual and augmented reality, experience design and e-commerce services across Europe and China. The acquisition will power Infosys' meta verse play.

#### **Tech Mahindra buys Third ware, picks stake in Geomatic.AI**

Tech Mahindra has acquired Mumbai-based enterprise applications start up Third ware in an all-cash deal worth USD 42 million. Third ware, founded in 1995 by Bhavesh Shah, offers solutions and services in the consulting, design, development, implementation and support of packaged solutions and covers areas like Robotic Process Automation (RPA), Enterprise Resource Planning (ERP) and Enterprise Performance Management (EPM) Third ware delivers cutting edge business solutions and services to over 300 customers across the globe which includes Ford Motor Company, Pfizer, United Nations Organizations, Visteon. Third ware's capability to provide end-to-end implementations and global rollouts of ERP solutions will give Tech Mahindra an edge in the manufacturing space.

#### **Operational revenue of HCL Technologies Limited from financial year 2017 to 2022**

Infosys and HCL may have to deal with a third suitor for Axon. Companies such as European Atos Origin, Paros-based Cap Gemini and Fujitsu- Siemens are all heavily entrenched players in the SAP Market. (Business world 2020).

### Mergers, Acquisitions and Takeovers

Acquisition implies that a company unilaterally relinquishes its independence and adapts to another firm's plans, while in mergers, all combining firms relinquish their independence and cooperate, resulting in the establishment of a common corporation. The takeover of companies is always not friendly. Sometimes, an aggressive firm tries to take over a firm against its desire resulting in a hostile takeover. Even though mergers and acquisitions (M&A) have been an important element of corporate strategy all over the globe for several decades, research on M&As has not been able to provide conclusive evidence on whether they enhance efficiency or destroy wealth. Thus, there is an ongoing global debate in the effects of M&As on firms. Mergers and Acquisitions have become common in India today. However, very little appears to be known about the long-term post-merger performance of firms in India, and the strategic factors that affect this performance. Our study attempts to fill this gap in knowledge about M&As in India. An attempt would be made to fit M&As in India, into some categories such as Strategic Acquisitions, Financial acquisitions, and conglomerate acquisitions, to have a better understanding and evaluation.

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## **A Study on Job Satisfaction of Manufacture Company Employees At Coimbatore**

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### **Abstract**

Employee satisfaction is a measure of how happy workers are with their job and working environment. Keeping morale high among workers can be of tremendous benefit to any company because happy workers are more likely to produce more, take fewer days off and stay loyal to the company. There are many factors in improving or maintaining high employee satisfaction. But before that, it is important to measure the satisfaction levels of the employees. Hence, this project aims at measuring Employee Satisfaction and its impact on employee retention. The project's conclusion includes the final questionnaire which can be used for the annual employee satisfaction survey in the company and an explanation of all the parameters used with their respective reasons. Recommendations which were drawn from the study and limitations of the research have been provided at the first chapter.

Key Words: Employee satisfaction, job evaluation.

### **Introduction**

Job satisfaction refers to an employee's general attitude towards his job. Job satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences. Job satisfaction is a function of or is positively related to the degree to which of the approval and the desires of the group to which individual tools for guidance evaluating social reality.

### **Importance Of Employee Saisfaction**

#### **Importance of employee satisfaction for organization**

- Enhance the employee retention.
- Increase productivity.
- Increase customer satisfaction.
- Reduce turnover, recruiting and training costs.
- Enhance customer satisfaction and loyalty.
- More energetic employees.
- Improve teamwork.
- Higher quality products and/or services due to more competent, energized employees.

#### **Importance of employee satisfaction for employee**

- Employ will believe that the organization will be satisfying in the long run.
- They will care about the quality of their work.
- They will create and deliver superior value to the customer.
- They are more committed to the organization.

- Their works are more productive.

### **Factors Influencing Employee Satisfaction**

#### **Organization development factors**

- Brand of organization in business field and comparison with leading competitor.
- Missions and visions of organization.
- Potential development of organization.

#### **Policies of compensation and benefits factors**

- Wage and salary.
- Benefits.
- Rewards and penalties.

#### **Promotions and career development factors**

- Opportunities for promotion.
- Training program participated or will do.
- Capacity of career development.

#### **Work task factors**

- Quantity of task.
- Difficult level of task.

#### **Relationship with supervisor factors**

- Level of coaching.
- Level of assignment for employee.
- Treatment to employee etc.

#### **Working conditions and environment factors**

- Tools and equipment.
- Working methods.
- Working environment.

#### **Corporate culture factors**

- Relationship with coworkers.
- Level of sharing etc.

#### **Competencies, Personalities and Expectations of employee factors**

- Competencies and personalities of employee are suitable for job.
- Expectations of employee are suitable for policies of organization.

### **FACTORS DETERMINING JOB SATISFACTION**

1. Mentally challenging work
2. Equitable rewards
3. Supportive working conditions
4. Supporting colleagues

### **Objectives of the Study**

#### **Primary objectives:**

To study the employees' job satisfaction towards ground staff at Coimbatore Airport

**Secondary objectives:**

To find out the level of job satisfaction of employees of Airline ground staff at Coimbatore Airport.

To find out whether the employees are satisfied with the working environment at Coimbatore Airport.

To find out whether the employees are satisfied with the salary and other benefits provided at Coimbatore Airport

To find out the factors that motivates the employees.

**Limitation Of the Study**

- ❖ The study restricts itself with in Coimbatore Airport
- ❖ The study assumes that the information was given by the employees can be with bias.
- ❖ Some employees were hesitated to give their real opinion about job satisfaction due to fear on management.
- ❖ Only selected factors of job satisfaction have been taken in this study.

**Review Of Literature**

**Mr. R. Gatewood and Mr. H. Field in their book** “Human Resource Selection” reveled that “Selection is the process of choosing individuals who have to relevant qualifications to fill jobs in an organization. The primary purpose of selection activities is to predict which job applicant will be successful if hired. The selection process from the reception through initial screening, application, testing, interview, medical and reference checking – must be handled by trained, knowledgeable individuals. Selection tests include intelligent and aptitude tests, achievement tests, assignment centers and general psychological or personality test.”

**Mr. R.L. Mathis and Mr.J.H.Jackson explored in their article** “Human Resource Management” **that**“ HRM realizes that people can make or break an organization because all decisions made regarding finance, marketing operations or technologies are made by an organization people. So it is accords highest priority to managing and people tries to integrate all HR programmers and policies with overall corporate strategies. It compels people at all levels to focus more on strategic issues rather than operational issues.”

**Dean & Snell, 2008.**

The planned HRM Employee Recruiting program should be able to clearly state the mission and objective of the recruitment process to be done. Specifically, the purpose of such policy is to offer a criterion and standard measure for recruiting new applicants or employees. The recruitment imposed by the HRM should also include a procedure so that the recruitment process should be accurate and correct. In this manner, the management should always be aware if a new position is Required or if a transferred/reassigned or terminated workers or employees would need a replacement.

The HRM shall complete the Employee Requisition form describing the job to be handled and obtains approvals from the department head. After which, the HRM is responsible in determining the most appropriate recruiting approach to be used. To let the applicants and employees be aware of the recruitment process, the HRM should provide a means of advertising the activity to all the



recruiters and agency. Further, the Human Resources Management must post all requisition of regular employment are open (Dean & Snell, 2009).

**Lipiec, 2011**

### **Research Methodology**

Research Methodology is a systematic way to solve a research problem; It includes various steps that are generally adopted by a researcher in studying the problem along with the logic behind them.

### **RESEARCH DESIGN**

The research design adopted for the studies is descriptive design. The researcher has to describe the present situation in order to know the behavior of the consumers. Hence descriptive research study is used. Descriptive research can only report what has happened and what is happening.

### **METHOD OF COLLECTION**

The study basically uses primary and secondary data. Primary data means data which is fresh collected data. Primary data mainly been collected through personal interviews, surveys etc. Secondary data means the data that are already available.

**SAMPLING UNIT:** Sampling unit is in Coimbatore

**Sample design:** Convenience sampling technique was used for the study.

### **STATISTICAL TOOLS USED**

### **The Classification of the Respondents by Age**

<b>PARTICULARS</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE (%)</b>
Below 25 years	28	28
26-35 Years	25	25
36-45 Years	26	26
Above 46 Years	21	21
<b>TOTAL</b>	<b>100</b>	<b>100</b>

The above table shows that **28%** of the respondents come under the age group of **below 25 years**, **25%** of the respondents come under the age group of **26-35 years**, **26%** of the respondents come under the age group of **36-46Years**, and **21%** of the respondents come under the age group of **above46 years**. thus, the majority of the respondents come under the age group of **below25years**.

### **The Classification of The Respondents By Qualification**

<b>PARTICULARS</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE (%)</b>
HSC	21	21
Diplomo	17	17



UG	25	25
PG	20	20
Others	17	17
<b>TOTAL</b>	<b>100</b>	<b>100</b>

The above table shows that **21%** of the respondents come under the **HSC category**, **17%** of the respondents come under **diploma category**, **25%** of the respondents come under the **UG category**, and **17%** of the respondents come under **another category**. Thus, the majority of the respondents come under the **UG Category**.

**TABLE: The Classification of The Respondents by Years in Service**

PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1-10 Years	32	32
11-20 Year	25	25
21-30 Years	16	16
Above than 31 Years	27	27
Total	<b>100</b>	<b>100</b>

The above table shows that **32%** of the respondents come under **1-10 Years**, **25%** of the respondents come under **11-20 Years**, and **16%** of the respondents come under the **21-30 Years**, and **27%** of the respondents come under **above than 31 Years**. Thus, the majority of the respondents come under the **1-10 years in service**.

**The Classification of The Respondents By marital Status**

PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
Single	58	58
married	42	42
<b>TOTAL</b>	<b>100</b>	<b>100</b>

The above table shows that **58%** of the respondents are **single** and **42%** of the respondents are **married**. Thus the majority of the respondents are **single**.

**The Classification of The Respondents By Number Of Dependents**

PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
Two-Four	32	32
Five-Seven	30	30
Eight-Ten	22	22
More than ten	16	16
<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows that **32%** of the respondents come under the **Two-Four dependents**, **30%** of the respondents come under **Five-Seven dependents**, **22%** of the respondents

come under the **Eight-Ten dependents**, **16%** of the respondents come under **more than ten dependents**. Thus, the majority of the respondents come **two-four dependents**.

### The Classification of The Respondents by Wage/Salary

PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
Below 10000	32	32
11,000-15,000	30	30
16,000-20,000	22	22
More than 25000	16	16
<b>Total</b>	<b>100</b>	<b>100</b>

The above table level of satisfaction t **32%** of the respondents come under salary level of **below 10,000**, **30%** of the respondents come under **11,000-15,000**, **22%** of the respondents come under the **16,000-20,000**, **16%** of the respondents come under **more than 25000 monthly incomes**. Thus the majority of the respondents come salary level of **below 10,000 towards monthly income**.

Thus, the majority of the respondents are **highly dissatisfied** towards bonus schemes provided by the organization.

### Chi Square Analysis

#### Step1:

Null hypothesis (Ho): There is no significance relationship between gender of the respondent and satisfaction with your job.

Alternative hypothesis (H1): There is some significance relationship between gender of the respondent and satisfaction with your job.

**Step 2:** Level of significance at 5%

#### Step 3:

GENDER	SATISFACTION WITH YOUR JOB					
	Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied	TOTAL
Male	15	17	12	20	6	70
Female	5	10	6	5	4	30
TOTAL	20	27	18	25	10	100

#### Step 4:

**Expected**

**frequency:**

Total	14	18.9	12.6	17.5	7
	6	8.1	5.4	7.5	3

#### Step 5:

O	E	(O-E)	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
15	14	1	1	0.071429
5	6	-1	1	0.166667
17	18.9	-1.9	3.61	0.191005
10	8.1	1.9	3.61	0.445679
12	12.6	-0.6	0.36	0.028571
6	5.4	0.6	0.36	0.066667
20	17.5	2.5	6.25	0.357143
5	7.5	-2.5	6.25	0.833333
6	7	-1	1	0.142857
4	3	1	1	0.333333
100	100	0	24.44	0.2444

Chi-square value= 0.24
------------------------

**Degree of freedom:**

(R-1) (C-1)

(5 -1) (2-1)

4

At the 5% Level

Table Value = 0.620339

Calculated Value =0.24

**Step 6:**

Factor	Calculated chi-Square Value	Table Value @ 5% Level	Degree of Freedom	Remarks
Occupation of the respondents and factors that influence to job satisfaction	0.24	0.620339	4	$H_0$ Accepted

**Inference**

The calculated value is (0.24) less than table value (0.620339). So, Null hypothesis is accepted. Hence, there is no relationship between gender of the respondents and satisfaction with your job.

**Findings**

- 70% of the respondents are male
- 26% of the respondents come under the age group of 36- 45 years

- 25% of the respondents come under the UG category
- 27% of the respondents come under the 1-10 years in service
- 58% of the respondents are single
- 32% of the respondents two-four dependent
- 32% of respondents come under the below 10,000 monthly income
- 28% of the respondents said that they have to no extent
- 27% of the respondents are satisfied with your job
- 30% of the respondents are satisfied towards wage/ salary
- 48% of the respondents feel highly satisfied towards working environment
- 60% of the respondents feel yes towards secured job
- 58% of the respondents feel satisfied leave facility
- 30% of the respondents feel highly satisfied towards handling procedure in your industry
- 30% of the respondents feel highly dissatisfied ESI and PF
- 58% of the respondents feel satisfied towards training facility given by the management
- 30% of the respondents feel highly satisfied towards canteen room
- 48% of the respondents feel highly satisfied towards transport facility provided by the organization
- 30% of the respondents feel highly satisfied towards safety measure provide by the organization
- 30% of the respondents feel highly dissatisfied towards bonus schemes provide by the organization

### **Suggestions**

- ❖ The company should increase the salary of the employees and should give other allowances like food allowance, school fees allowance, washing allowances etc.,
- ❖ The company should improve and systematize their grievance handling procedure, so as to make the employees happy otherwise, the employees may leave the factory. The management should monitor that the grievance handling machinery works properly.
- ❖ The company should improve their transport facilities. As such, there is no transport facility for the employees from the quarters to the factory. Likewise school going children's of staff should be provided with proper transport facilities. And transport facilities should be made for purchasing groceries and vegetables for the ladies in the quarters.
- ❖ The company should fix proper norms and procedures for promotion policies. So, that it will encourage the employees in concentrating on their job.
- ❖ The company should try to improve the safety measures, giving extra care for medical facilities

### **Conclusions**

Employee satisfaction is essential to the success of any business. A high rate of employee contentedness is directly related to a lower turnover rate. Thus, keeping employees satisfied with their careers should be a major priority for every employer. There are numerous reasons why employees can become discouraged with their jobs and resign, including high stress, lack of

communication within the company, lack of recognition, or limited opportunity for growth. The study has revealed various factors that have an impact on the employee's productivity, behavior and attitude in the work place. The study have also suggested various measures to improve the current satisfaction level and it is the management to improvise on these finding and accept the suggestion to implement for the betterment of both organizational and individual growth and development.

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### An Analytical Study on Employee Welfare Measures with Special Reference to It Industry

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### Introduction of the Study

“Welfare is a broad concept referring to a state of living of an individual or a group in a desirable relationship with the total environment, ecological, economic, and social welfare includes both the social and economic contents.

### **Importance**

The industrial progress depends on a satisfied labor force, and the importance of employee welfare measures. After the placement of the employees, they should be given proper training and programmers to develop their efficiency so as to serve develop their efficiency so as to serve the organizations better. Welfare facilities are designed to take care of the well – being of the employees. They do not generally result only in monetary benefit. These welfare measures are provided by government non – government agencies and the employers.

### **Definitions Of ‘Employee Welfare’**

The oxford dictionary defines employee welfare as ‘efforts to make life worth living for workmen’. The concept of ‘labor welfare’ is flexible elastic and differs widely with time region, industry social values, customers’ degree of industrialization, the general social development of the people and the political ideologies prevailing at a particular moment.

### **Welfare of Employee**

The factories act contains provisions about welfare of employee; these are as follows. There shall be separate and adequately screened washing facilities for the use of male and female employee.

### **Objectives of The Study**

- To identified the need for employee welfare measure.
- To analyses the effectiveness of the employee welfare measures.
- To find the satisfaction level of employees regarding welfare measures.
- To recommend suggestion based on the study.
- To provide better life and health to the employees.

### **Scope of the Study**

- Research will help to understand the welfare program of employee’s feedback. The studies help to identify the effectiveness of the employee welfare program.
- To find out the employee satisfaction with the welfare program given by the organization

### **Limitations of the Study**

- Due to time constraints an in-depth enquiry could not be conducted.
- Most of the Respondents were busy and some of them even hesitated to co-operate fully.
- Some employee may be on leave
- Certain employees were biased in answering to the questions
- Some employed are illiterate and may not be able to fill up the questionnaire themselves.

### **Review Of Literature**

#### **Research Studies Undertaken in the Area of Labor Welfare measures**

The study by Juliette summers (university of sterling) and Jeff Hyman (university of Aberdeen) concludes that combinations of participation and welfare measures (such as equal



opportunities and family-friendly policies) appear to enhance both organizational performance and the quality of working life.

**Baggs, Silverstein and Foley (2003)** found that the contributes to understanding how inspections may trigger different mechanisms resulting in changes in outcomes. Bags at al. found a significant decreases in claims associated with visits that included the potential for penalties but not for consultations only visits where penalties were not enforced. They conclude that the simple presence of the regulator in the workplace was not associated with a reduction in claim rates. The study also found that the decreases in claims associated with enforcement activity was not specific to the particular issues cited but was an across-the-board decrease.

### **Research Methodology**

#### **Research Methodology**

Research methodology is a way to systematically show the research problem. It may be understood as a science of studying how research is done scientifically. So, the research methodology not only talk about the research methods but also consider the logic behind the methods we use in the context of our research study and explain why we are using a particular method or technique or why we are not using others so that the research results are capable of being evaluated either by the researcher himself or by others.

#### **Descriptive research designs**

The study is descriptive in nature. Descriptive studies are more than just a collection of data; they involve measurement, classification, analysis, comparisons and interpretation. It tells about what exist at present by determining the nature and degree of existing condition.

### **Source Of Data**

#### **Primary Data**

The primary data are those which are collected afresh and for the first time and thus happen to be original in character.

#### **Secondary Data**

The secondary data are those which have already been collected by someone else and which have already been passed through the statistical process. Details of the company and relative areas are collected from the preview's studies in secondary data.

#### **Tools for data collection**

The researcher used interview schedule for the purpose of collecting data from the respondents for this study. The present study is based on the primary data, the collected from respondents directly as first stand information through questionnaire method.

A questionnaire consists of a number of questions printed or typed in a define order on a from or set of forms. The respondents were met in person by the researcher and data collected.

#### **Sampling Method**

The Sampling Method used is simple random sampling to find out the training and development of employees in the organization.

#### **Population**

The population of the company is 200.

### Sample Size

The sample size taken by the Researcher is 120.

### Statistical Tools Used

The collected data has been analysed with the help of tools like simple percentage method.

1. Simple percentage
2. Chi-square
3. ANOVA

#### Simple Percentage Method

Percentage refers to a special kind of ratio. Percentage are used to make a comparison between two or more series of data. The percentage method is sometimes used for describing relationship. Since the percentage reduces everything to a common base and allows meaningful comparison to be made.

#### Number of Respondents

$$\text{Percentage Analysis} = \frac{\text{Number of Respondents}}{\text{Total Number of Respondents}} \times 100$$

Simple percentage analysis refers to a ratio. With the help of absolute figures, it will be difficult to interpret any meaning from the collected data, but when percentages are found out then it becomes easy to find the relative difference between two or more attributes.

#### Chi-Square Test

The Chi-square is an important test among the several tests of significance developed by statisticians. Chi-square symbolically written as  $\chi^2$  is a statistical measure used in tests of sampling analysis.

This can be calculated using formula

$$\chi^2 = \frac{\sum (O - E)^2}{E}$$

$$E = \frac{RT \times CT}{N}$$

Where

- |    |   |                              |
|----|---|------------------------------|
| O  | - | Observed frequency           |
| E  | - | Expected frequency           |
| RT | - | Row Total                    |
| CT | - | Column total                 |
| N  | - | Total Number of observations |

The table value is found at five percent level of significance and for available degree of freedom.

$$\text{Degree of freedom} = (R-1) \times (C-1)$$

Where

R= Number of Rows

C= Number Columns

If the calculated value is greater than the table value hypothesis is rejected otherwise accepted.

### One-Way Anova

Under the one-way ANOVA, we consider only one factor and then observe that the reason for said factor to be important is that several possible types of samples can occur within that factor.

Analysis of variance table for one-way ANOVA

SOURCES OF VARIATION	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F-RATIO
<b>BETWEEN SAMPLES</b>	$n_1(X_1 - \bar{X})^2 + \dots + n_k(X_k - \bar{X})^2$	(k-1)	<u>SS BETWEEN</u> (k-1)	<u>MS BETWEEN</u> MS WITHIN
<b>WITHIN SAMPLES</b>	$\sum (X_{ij} - \bar{X})^2 + \dots + \sum (X_{ki} - \bar{X})^2$	(n-k)	<u>SS WITHIN</u> (n-k)	
<b>TOTAL</b>	$\sum (X_{ij} - \bar{X})^2$ i=1, 2... j=1, 2...	(n-1)		

This ratio is used to judge whether the difference among several means is significant or is just a matter of sampling fluctuations.

### Data Analysis and Interpretation

#### WORK EXPERIENCE OF THE RESPONDENTS

S.no	Factor	Respondents	Percentage%
1	Below 5 years	25	21
2	5-10 year	28	23
3	11-15 year	35	29
4	Above 15 years	32	27
<b>Total</b>		<b>120</b>	<b>100</b>

(Source: Primary Data)

#### Interpretation

The table shows that 29% of the respondents are 11-15 year, 27% of the respondents are above 15 years, 23% of the respondents are 5-10 years, and 21% of the respondents are below 5 years.

#### Level Of Satisfaction About Canteen Facility

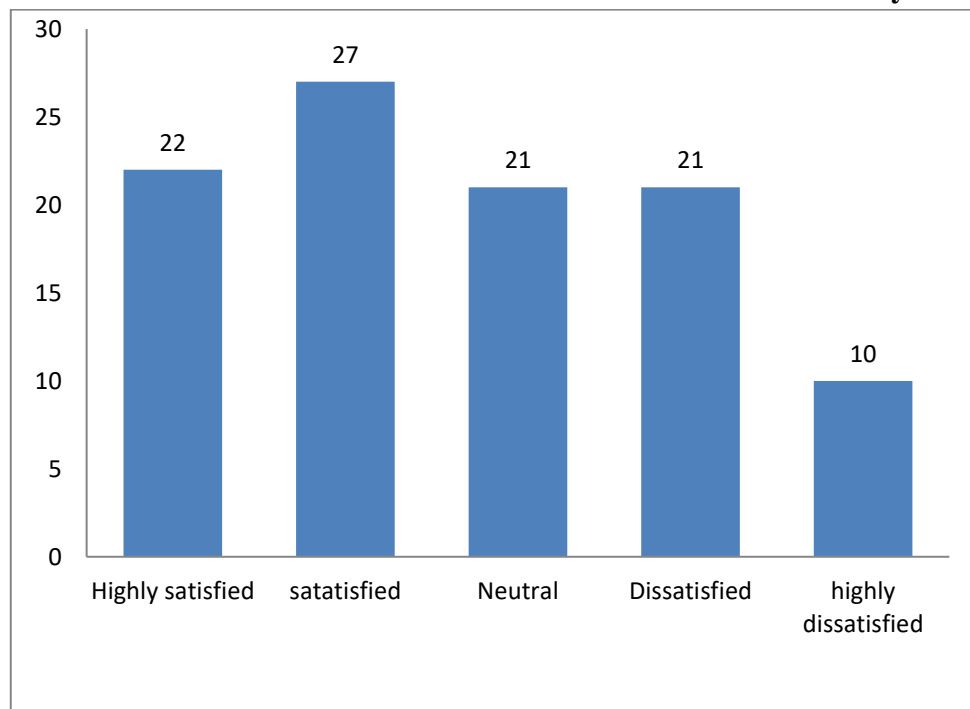
S.no	Factor	Respondents	Percentage
1	Highly satisfied	26	22
2	Satisfied	33	27
3	Neutral	24	21
4	Dissatisfied	25	21
5	Highly dissatisfied	12	10
<b>Total</b>		<b>120</b>	<b>100</b>

(Source: Primary Data)

### Interpretation

The table shows that 27% of the respondents are satisfied about canteen facility, 22% of the respondents are highly satisfied, 21% of the respondents are neutral and dissatisfied, 10% of the respondents are highly dissatisfied, and 3% of the respondents. It is concluded the majority of the respondents

**Level Of Satisfaction About Canteen Facility**



### One Way Anova

#### Aim

To find out the amount of variation within each of these samples, relative to the amount of variation between the samples regarding the rank assigned by the employees about various facilities.

### Rating Of Facilities

Facilities	Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
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<b>Uniform facilities</b>	26	35	21	31	7
<b>Water facility</b>	31	29	20	27	13
<b>Children education facilities</b>	27	37	26	26	4
<b>Medical facility</b>	22	37	19	29	13
<b>Canteen facility</b>	26	33	24	25	12
<b>TOTAL</b>	132	171	110	138	49

**Hypothesis (H<sub>0</sub>)**

There is no difference in rank assigned by respondents for various facilities.

**Hypothesis (H<sub>1</sub>)**

There is difference in rank assigned by respondents for various facilities.

T=Total of all the individual values of n items.

Here, T=600 and n=25, k=5

Correction factor =  $(T)^2/n = (600 \times 600)/25$   
= 14,400

Total SS (sum of squares) = sum of squares of all the observations -  $(T)^2/n = 750/25 = 30$   
=  $\sum X_{ij}^2 - (T)^2/n = 600/25 = 14,400$

$SST = 26^2 + 35^2 + 21^2 + 31^2 + 7^2 + 31^2 + 29^2 + 20^2 + 27^2 + 13^2 + 27^2 + 37^2 + 26^2 + 26^2 + 4^2 + 22^2 + 37^2 + 19^2 + 29^2 + 13^2 + 26^2 + 33^2 + 24^2 + 25^2 + 12^2 =$   
= 16252 - 14,400 = 1852

SS BETWEEN =  $\sum (T_j)^2/n_j - (T)^2/n$   
=  $(132^2/5) + (171^2/5) + (110^2/5) + (138^2/5) + (49^2/5)$   
= 3484.8 + 5848.2 + 2420 + 3808.8 + 4802  
= 20363.8 - 14400  
= 5963.8

SS WITHIN =  $\sum X_{ij}^2 - \sum (T_j)^2/n_j$   
= 16252 - 20363.8  
= -4,111.8

**One –Way Anova Table**

SOURCES OF VARIATION	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F-ratio	F-RATIO (5% F-limit)
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<b>BETWEEN SAMPLES</b>	5963.8	(k-1) (5-1) =4	5963.8/4=1490.95	- 4111.8/4=1027	F (4,20) =2.87
<b>WITHIN SAMPLES</b>	-4,111.8	(n-k) (25-5) =20	-4,111.8/4= 1,027.95	5963.8/- 4111.8 = 1.4504	
<b>TOTAL</b>	1852	(n-1) (25-1) =24			

At 5% level of significance, the tabulated value is 2.87

Calculated value =14504

Therefore,

Calculated value (14504) < tabulated value (2.87)

Hence,

$H_0$  is accepted and  $H_1$  is rejected.

### Result

It was observed that there is no significant difference in rank assigned by respondents for various facilities.

### Suggestions

- The company may concentrate on the employee benefits scheme like family insurance, education and family tour, this motivates the employee on their work.
- The company can plan and provides opportunities for the development of the employees.
- To company provide special training like job rotation, communication skills and personally development to an employee this improves their interpersonal relationship with in the organization.
- The company can provide better working environment can be provided the employees.
- The company can improve the basic facilities for the employees.

### Conclusion

An organization comes into existence when a group of people work together to achieve something for themselves and for others. Organizations are not merely bricks, mortar, machines or inventories. It is the people who staff and manage organization. So the human factor is crucial in determining the prosperity of an organization. From this study it was clear that most of the employees were welfare with the current level of employee welfare facilities conducted by the organization. But the employees prefer to more facilities that can bring out their hidden talents and increase their productivity. Now a days the gaining importance in greater sense. Companies are investing more welfare measures on the employees, so as to enhance the productivity. Over all it can be said that is an essential part of growing business. In fact, welfare measure has greater impact on the employees and their work environment.



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### **A Study on Employee Perception Towards Logistics Management With Reference To Southern Frozen Foods, Pollachi**

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#### **Abstract**

The paper aims to analyze the satisfaction level of the employees towards the services provided to them. The adoption of the employee towards the organization helps to increase the customer. This research result indicated that the main reason for the employee satisfaction is the services provided to them from the organization. The main finding of this research is most majority of respondents are satisfied towards their business environment and their work place and the services they provide to the customers.

#### **Introduction of the study**

Logistic management oversees and optimizes the processes of acquiring inputs from suppliers, converting those inputs into a finished product, and delivering those products—or outputs—to customers.

LOGISTIC MANAGEMENT is an umbrella term that refers to a variety of approaches for the management of natural and human resources from the supplier to the manufacturer or service provider to the consumer and back. This includes the identification and creation of new opportunities for products and services in cooperation with upstream and downstream partners, and the involvement of internal as well as external stakeholders in decision making on Logistic matters. Traditionally, a Logistic is: A network of companies that exchange resources such as materials and information to deliver products to customers. Logistics consist of a company, its suppliers, its distributors, and its customers. In the traditional Logistic structure resources flow downstream to the consumer. The supply network consists of a focal company and its suppliers, retailers, and customers.

### Research Method

**Research Design:** Researcher used

**Descriptive research.** Sample size: 80 employees in Pollachi city.

**Sample design:** Probability Sampling-Simple random sampling

**Source of data:** For this study both primary data and secondary data has been used.

**Primary data:** Well-structured questionnaire.

**Secondary data:** Books, journals, magazines, articles, newspaper and websites. Statistical tools used: Simple percentage analysis, One way-Anova, U test, T test

### Objectives of the study

- To understand about the problems in shipment.
- To analyze employee satisfaction level of logistics policies.

### Limitation of the study

- This study is restricted only to Pollachi city.
- The study focuses on logistics management part only.
- In adequacy of time is the main limitation of the study.
- The respondents were not found to be very keen in answering the questions.
- The sample size is taken here is 80 and so the findings cannot generalized.

### Findings

52.5% of the respondents are almost never relying on sales representative to meet their informational needs. —

32.5% of the respondents are highly satisfied towards complete and accurate deliveries. —

36.2% of the respondents are highly satisfied towards delivering dispatches in good condition. —

32.5% of the respondents are satisfied towards allotted product delivering lead times. —

52.5% of the respondents are satisfied towards ordering system of the company. —

46.2% of the respondents agree towards meeting quoted lead-times. —

35.0% of the respondents are satisfied towards knowledge of product, services and policies that with the company.

31.2% of the respondents disagree towards company flexible in conducting business. —

28.8% of the respondents agree towards company personnel knowledge and responsive to their needs. —

31.2% of the respondents strongly disagree towards no problem with arranging for special deliveries or shipments. —

The age of the respondent is an influencing factor towards timely delivery of the product.

— The gender of the respondent is an influencing factor towards satisfaction level on ordering system of the company.

— The gender of the respondent is an influencing factor towards satisfaction level on allotted product delivering lead times.

### **Suggestions**

A proper response is not there for getting information source about the service provided by the customers. The company can be transparent on their corporate social responsibility to provide proper information for service provided. — The respondents feel that the company never communicate about the changes to the promised dates and if the company looks after this issue in future period of time, then there is a chance of satisfaction with the customers.

### **Conclusion**

Logistics which includes suppliers, distributors, and customers. The customer starts the process of events when they decide to purchase a product that has been offered for sale by a company. The main objective is to understand the Employees perceptions in Logistic process and to study about the current policies satisfaction level. This study reveals that most of the respondents feel that the company never communicate about the changes to promised dates and if the company have proper notice to these problems, the employee satisfaction level will be increased.

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## **A Study on Stress Management of Employees in Selected Textile Industries in South India**

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### **Introduction**

The role of Human Resource Management in organization has been evolving dramatically in recent times. The days of personnel management performing clerical duties such as record keeping paper pushing and life maintenance are over. Human Resource is increasingly receiving attention as a critical strategic partner, assuming stunningly different, for reaching transformational roles and responsibilities. Taking the strategic approved to human resource management involves making the function of managing human assets the most important priority in the organizations and integrating all human resource policies and programmed the frame-work of a company's strategy.

Human Resource Management is a process bringing people and organizations together so that the goals of each are met. In short, it may be defined as the art of procuring, developing and maintaining competent workforce to achieve the goals of an organization in an effective and efficient manner. The scope of Human Resource Management is very wide. Research in behavioral sciences, new trends in managing knowledge workers and advances in the field of training have expanded the scope of Human Resource in recent years.

The primary purpose Human Resource Management is to make people's strengths productive and to benefit customers, stock holders and employees. Human Resource Management requires that employees be motivated to exert their maximum efforts that their performance be

evaluated properly for results and that they be remunerated on the basis of their contributions to the organizations.

Human Resource Management tries to prompt and stimulate every employee to realize his potential. To this end suitable programmed have to be designed and aimed at improving the quality of work life. It makes employment in the organization a desirable, personal and social situation. Without improvement in the quality of work life, it is difficult to improve organizational performance.

### Statement Of the Problem

Work stress is a real phenomenon and it is associated with job satisfaction level of a worker in any place. In the case of Employees of Textiles industries there are many factors leading the employees in stressful situations. Some important factors associated with organizational stress among the employees are their over work load, working condition, role conflict, role ambiguity, relationship between managers and employees, society and family members, lack of experience in dealing the Human Resource procedures, lack of sense of belonging among the employees. Other than this, the employees find lack of availability and associability in department, lack of objectivity, multiple roles, lack of office space and time.

From this point of view, we can find that the employees of textile industries facing lot of stress in the organizations. All these factors effect there physical, mental, social circumstances. It makes an employee ineffective and inefficient in their functional roles.

This made the researcher to opt for the study “A Study on Work Stress among Employees with special reference Textile Industries in South India”. Through this research the researcher wanted to highlight the work stress faced by the employees.

### Objectives of the Study

- 1.To study the factors related to level of Acceptance with Respect to Causes for the Stress of Employees in Selected textile Industries in South India
2. To assess factors related to the strategies to cope with stress of employees in Selected textile Industries in South India
3. To offer suggestions to mitigate the stress problems identified

### Gender And Level of Satisfaction

S.NO	GENDER	NO. OF RESPONDENTS	%	MEAN	RANGE		STD
					MIN	MAX	
1.	MALE	563	75.1%	126.3321	97.00	155.00	8.76998
2.	FEMALE	187	24.9%	131.6845	111.00	156.00	7.30532
	TOTAL	750	100%	127.6667	97.00	156.00	8.73682

It is identified from table, that 75.1per cent of the respondents are males and that employees on the males ranged between 97 and 155 with an average of 126.33 and remaining 24.9 per cent of the respondents are females and that impact of employees on the females ranged between 111 and 156 with an average of 131.68.

### Gender And Level of Satisfaction



S.NO	GENDER		TOTAL CODE IMPACT OF STRESS					TOTAL
			SA	A	NA	DA	SDA	
1.	MALE	COUNT	82	100	133	100	148	563
		%	58.6%	66.7%	78.7%	76.9%	91.9%	75.1%
2.	FEMALE	COUNT	58	50	36	30	13	187
		%	41.4%	33.3%	21.3%	23.1%	8.1%	24.9
	TOTAL	COUNT	140	150	169	130	161	750
		%	100.0 %	100.0%	100.0%	100.0	100.0%	100.0%

It is observed from the above table that satisfaction level of employees was the Strongly Disagree (91.9 per cent) among the male respondents and the Strongly Agree (41.4 per cent) among the female respondents. The percentage of Neutral Agree level Satisfaction of employees was the (78.7 per cent) among the male respondents and the Agree level of satisfaction (33.3 per cent) among the female respondents. The Strongly Agree level of Satisfaction of employees was the (58.6 per cent) among the male respondents and the Strongly Disagree level of satisfaction (8.1 per cent) among the female respondents. In order to identify the difference between the gender of the respondents and satisfaction level of employees, ANOVA test was employed.

#### Cadre And Level of Satisfaction

S.NO	CADRE	NO. OF RESPONDENTS	%	MEAN	RANGE		STD
					MIN	MAX	
1.	WORKMAN	424	56.5%	126.8255	97.00	155.00	9.08862
2.	SUPERVISORY STAFF	59	7.9%	127.7966	113.00	156.00	8.55163
3.	OFFICER	267	35.6%	128.9738	109.00	148.00	8.04891
	TOTAL	750	100.0%	127.6667	97.00	156.00	8.73682

It is observed from the above table that that satisfaction level of employees was the highest (56.5 per cent) among workman, and the lowest (7.9 per cent) among supervisory staff of respondents, The medium level of level of satisfaction of employees was (35.6 per cent) among officer.

#### Cadre And Level of Satisfaction Anova Table

	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
CADRE: BETWEEN	757.206	2	378.603	5.013	.007



GROUPS (COMBINED)					
WITH IN GROUPS	56415.461	747	75.523		
TOTAL	57172.667	749			

It is identified from the table that the p-value is more than 0.05; and the results are significant. Hence, the hypothesis “there is difference occupation of the respondents and satisfaction level of employees” disproved. This shows that there is difference between age and impact of satisfaction level of employees.

**Reliability Of Scales and Item-Construct Loadings- Factors Related To Level Of Acceptance With Respect To Causes For The Stress Of Employees**

S.NO.	ITEMS	SCALE MEAN IF ITEM DELETED	CRONBACH'S ALPHA IF ITEM DELETED
1	Inadequate salary	111.32	.785
2	Rigid rules and regulations	111.65	.789
3	Inhuman attitude	111.78	.786
4	Needless punishments	111.64	.785
5	No reward for hard work	111.37	.789
6	Lack of job security	111.51	.783
7	Too much responsibility	111.85	.788
8	Heavy workload	111.64	.785
9	Little scope for personal growth	111.99	.772
10	Lack of freedom to make decision	111.66	.769
11	Unsatisfactory working conditions	111.75	.771
12	Lack of clarity in job assignments	111.78	.777
13	Monotonous, repetitiveness and boredom nature of job	111.61	.778
14	Dogmatic nature of peers	112.34	.786
15	Poor relationship with subordinates and superiors	111.61	.773
16	Lack of cooperation from work group	111.99	.772
17	Ignorance of employees' suggestions, opinions and contributions	111.66	.769
18	Favoritism and biasness	111.75	.771
19	Absence of mutual help among employees	111.78	.777
20	Impish system set by employees	111.61	.778
21	Lack of recognition from society	112.42	.792
22	Social obligations and restrictions	111.40	.789
23	Criticism and gossips	111.61	.773

24	Culture and sub-culture	111.99	.772
25	Poor relations with relatives	111.66	.769
26	Less revenue	111.75	.771
27	Conflict with family members	111.96	.790
28	Staying away from family	111.69	.788
29	Problems from children	111.91	.791
30	Illness of the family members	112.22	.793
	<b>MEAN</b>		<b>115.62</b>
	<b>VARIANCE</b>		<b>86.458</b>
	<b>STD. DEVIATION</b>		<b>9.298</b>
	<b>CRONBACH'S ALPHA BASED ON STANDARDIZED ITEMS</b>		<b>.783</b>
	<b>CRONBACH'S ALPHA</b>		<b>.786</b>
	<b>NO OF ITEMS</b>		<b>30</b>

The reliability of scales used in this study was calculated by Cronbach's coefficient alpha. Cronbach's alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. Based upon the formula  $\alpha = \frac{rk}{[1 + (k - 1)r]}$  where k is the number of items considered and r is the mean of the inter-item correlations the size of alpha is determined by both the number of items in the scale and the mean inter-item correlations.

#### **Reliability Of Scales and Item-Construct Loadings- Factors Related To The Strategies To Cope With Stress Of Employees**

S.NO	ITEMS	SCALE MEAN IF ITEM DELETED	CRONBACH'S ALPHA IF ITEM DELETED
1	Sharing problems with family members, friends and others	54.67	.823
2	Consulting with well-wishers	54.10	.811
3	Going to temple, park, shopping, and native place for relaxation	54.29	.806
4	Practicing of meditation to cope with stress	54.16	.793
5	Getting counseling from psychiatrist	54.33	.787
6	Playing with pet animals	54.29	.791
7	Walking to burnout stress	54.25	.795
8	Taking hydrotherapy to reduce stress	54.02	.793
9	Watching TV, hearing music, and indoor games	54.17	.809

10	Organizing wellness programmes like exercise, mediation, relaxation techniques to relieve employee from stress	54.11	.796
11	Management of job boredom by job rotation	54.49	.805
12	Management of job boredom by transfer	54.17	.799
13	Conduct of knowledge up gradation and training programmed	54.25	.804
14	Encouraging mutual consultation between individuals for purposes of redefining the job	54.29	.808
15	Arrangement for excursion tours, adventure trips and family picnic	54.12	.815
	<b>MEAN</b>		<b>58.12</b>
	<b>VARIANCE</b>		<b>43.705</b>
	<b>STD. DEVIATION</b>		<b>6.611</b>
	<b>CRONBACH'S ALPHA BASED ON STANDARDIZED ITEMS</b>		<b>.811</b>
	<b>CRONBACH'S ALPHA</b>		<b>.813</b>
	<b>NO OF ITEMS</b>		<b>15</b>

It clear that, all the fifteen measurement scale items are reliable as the Cronbach alpha coefficient of 0.958. It is greater than the threshold level of 0.70. It's provided good estimates of internal consistency reliability and also coefficient alpha values ranged from .791 to .815 for all the constructs. It is indicating that the scales used in this study were reliable. It clearly indicates that above scale items are consistent with each other and they are reliable measure of strategies to cope with stress of employees, so that it can be used for next analysis.

### Suggestion

The researcher points out some suggestions to regulate and prevent the stress level of employees Textiles Industry.

- Understand and solve their problems through proper counseling and awareness programs.
- Give more importance for recreational activities.
- Conducting training programs, organizing workshops and discussions are essential to employees to get more acquaintance relating to the job.
- A counselor should be appointed in the organization, who can look after the grievances to employees and can deal with social, emotional and psychological problems.
- Practice relaxation techniques like yoga and meditation. May be arranged by the organization.

### Conclusion

Science and technology are advancing day by day in the society. Today's society is accepting all these changes. These changes cause to different problems in the society. The

researcher conducted a study on Stress and Stress Management among employees in Textiles industries. In this competitive field they are facing a lot of psychological, Health problem and the problems from the society also. The study came out with certain findings. Nearly half of the respondents had very relaxed stress level and most of the respondent had the stress management. Though the stress can be reduced through counseling, recreational activities and relaxation techniques. Most of the respondents did not have stress. This is a good result got from the respondents.

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### A Study on The Importance of Time Management

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### Abstract

The popular literature on time management claims that engaging in time management behaviors results in increased job performance and satisfaction and fewer job tensions, a theoretical framework and empirical examination are lacking. To address this deficiency, a process model of time management was proposed and tested. Employees in a variety of jobs completed several scales; supervisors provided performance ratings. Examination of the path coefficients in the model suggested that engaging in some time management behaviors may have beneficial effects on tensions and job satisfaction but not on job performance. Contrary to popular claims, time management training was not found to be effective.

Time Management is an answer to the issue of “not enough time”. Simply put, time management revolves around the tools, skills, activities and mindset needed to work each day in a more efficient manner. We must admit that wasting time is a favorite pastime for most Senior Members, and it is

important for Senior Members to acquire knowledge on time management so that productivity could be improved.

### **What is Time Management?**

Time is a very precious thing; it has wings and as such is passing very fast. Time Management “is a set of principles, practices, skills, tools and systems that help us use time to accomplish what we want. It refers to the techniques, and strategies that individuals use in utilizing and maximizing the work that they do. Managing time effectively helps to develop a better personality in an organization. Time, once gone never comes back. Time plays very important role in the life of all members in an organization. It is important for Senior Members to factor time in their daily activities. Senior Members, who manage time profitably, never feels any difficulty in the performance of their duties and are always branded as the successful employees. Proper time management always results in contentment and satisfaction in daily life.

Time Management is a set of tools which allows us to:

1. Eliminate waste
2. Be prepared for meetings
3. Reduce excessive workload
4. Monitor project progress
5. Allocate resource (time) appropriately to tasks.
6. Ensure that long term projects are not neglected
7. Plan each day effectively
8. Plan each week effectively and to do so with little self-discipline

The time management matrix Time Management Matrix is associated with Stephen Covey on his work in the book titled “first things first”. Stephen, considered time management under four (4) quadrants, in which task, responsibilities, and daily activities belong to. These are: urgent and important (Quadrant 1), not urgent but important (Quadrant 2), urgent but not important, (quadrant 3), not urgent and not important (Quadrant 4). According to Covey, one need to manage those listed under “urgent and important” focusing on those under “urgent but important,” and simply avoid those under quadrants 3 and 4.

The multiplier effect of good time management Many managers have to find ways to improve their own time management skills and have refined their working habits so they function more effectively. They have sharpened their skills, techniques and disciplines and can now focus on what count most. Managers have learnt to cope with the changing conditions, interruptions, and the demands placed on them by others. But even more importantly, some of these managers have shared the techniques with others, particularly the people reporting to them. Active guidance of members in group meetings and one-on-one counselling sessions has minimal frustration, and increased job satisfaction for all. This makes so much obvious sense that, it is hard to believe that there are managers who neglect this participatory approach.

But some Managers are their own worst enemies. They make the incorrect assumption that their time-effective work habits will be clear to all and over time will be adopted by the supervisors reporting to them, the group as a whole and other people and groups in the organization. The reality



is that such an occurrence is not automatic. The manager's behavior may be misconstrued and these managers may be seen as abrasive. The attendant resentment may adversely affect work routine and productivity.

It is often difficult for managers to recognize the impact that their actions place on others. Managers usually function with positive and constructive intent, but methodology and timing are crucial. A Manager's action can be perceived as and become real obstacles to achievement. Where managers function in a counterproductive manner with subordinate management, the subordinate managers not only may be diverted from what is important but also may transmit change directed to their own subordinates. As a result, a negative multiplication may take place. The way to avoid the trap is also the way to achieve a positive multiplication.

### **Why is time management important?**

Managers think the importance of time management and the usefulness of a time management system lies in allowing people to accomplish more things faster. Time management teaches people how to manage their lives and time effectively. Here are some reasons why it is important to manage time advantageously:

#### **(i) Time is limited:**

Time is a very special resource in that you cannot store it or save it. Everybody gets the same amount of time each day, but if you don't use your time profitably and wisely, you may end up losing all the number of man hours for the day. Time is limited to 24 hours a day. So, we must plan our life wisely.

#### **(ii) Time is Scarce:**

Most managers feel like they have too much to do and as such do not have enough time. Lack of time is blamed for everything e.g., from not getting enough exercise, poor finances, unachieved goal, too much stress, bad relationship, and even an unfulfilled life. Time management helps us to use the time wisely; time management helps us to set our priorities.

### **Significance of Effective Time Management**

The significance of effective time management are as follows:

(i) **Improves quality of life:** Effective time management improves the quality of life. By managing the time, some of the most common problems such as stress and lack of time for personal interests, can be solved very effortlessly.

(ii) **Reduces frustration:** Time is the only tool that can make or break you. This is applicable, especially when you have to create a balance between your professional and personal life in your hectic and tiresome routine. To serve the purpose, you would have to find time to do everything that your heart desires. By managing our time in a proper manner, we will get rid of all frustration.

(iii) **Gives peace of mind:** A peace of mind is required to lead a healthy and disease-free life. Restless and stress are the root cause for the lack of peace. Stress causes us to think and perform work undesirably, and this leads to chains of emotion which adversely affect people around us. By managing the time wisely, we will be able to give ourselves and our loved ones the much-desired time and attention. Since the social ties between the administrator and the people around us are strong, there is the need to manage time effectively.



### **Barriers to efficient time management**

The common barriers to time management are:

(i) Television: Televisions have proved to be an excellent tool when it comes to Entertainment or information of the entire world on a press of a button, but on the other hand it is a great barrier to time management. Watching a lot of unnecessary shows on television is a barrier. If there is a particular show that we need to watch for work related purpose, then we should switch on the television. Assistant Registrars must avoid watching late night shows as this will delay the day schedule.

(ii)Telephones: One of the top common time management barriers are telephones. While the telephone has been proven to be an excellent tool when it comes to methods of communication, it can havoc personal schedule. Unnecessary telephone calls should be screened to avoid the hassle of having one's time affected. Assistant Registrars must choose to attached a caller identification system and an answering machine in order to appropriately screen and track important calls from others. Once we have our work completed, or the item on our daily calendar accomplished, we can then take time to return calls. This is also important when it comes to telephone calls that we receive on a cell phone. I t is important for Assistant Registrars to rely on phone messages rather than phone calls.

(iii)Internet: Internet has been a good tool for research, projects and one of the quickest means to communicate. However, there is a disadvantage to as well. People tend to do unnecessary work, example, chatting a lot on the internet makes us some times delay important or urgent tasks. Administrators spend lots of time on the internet either face booking or twittering and this behavior affects man hours. This makes us undisciplined and a barrier to time management. One of the methods to overcome the barrier to time management is to check our emails and reply the immediate and important emails.

### **Inefficient Time Management**

This is a situation where the practices, skills, tools and system that help managers to use techniques and strategies in utilizing and maximizing the work that are not effectively developed. Time is very vital in everything that we do. If time is not properly managed, it will affect our attitude, behavior, skills, time to work, decisions, emotions, productivity etc. at our work places. As administrators, we must not forget that we represent the Registrar at the various faculties, departments, sections and units, and members must be time bound to help assist in the achievement of the goals of the university.

Ineffective time management in the organization may lead to:

- (i) Increase in the organizational waste
- (ii) Members always unprepared for meetings such as (Academic Board meeting, Faculty Board meeting, Departmental Board meeting and other Committee meetings.)
- (iii) Piled up of work at the office.
- (iv) Lack of monitoring and evaluation of subordinates.
- (v) Underutilization of resources. This includes both capital and human resource.
- (vi) Neglects of projects.

- (vii) Improper planning of activity for the day.
- (viii) Lack of disciplined and self-control.
- (ix) Unachievable dreams

### Recommendations

It is the duty of the managers in the Department to place time first in all the activities that they do. Time is a tool to the success of all senior members in the entire organization. And members must work tirelessly to overcome constraint in every decision we take at both workplace and home.

Time when properly managed will lead to:

- (i) Increase in competition at workplace.
- (ii) Increase in opportunities of being successful in life.
- (iii) Utilization and maximization of resources at work
- (iv) Personality development in the institution
- (v) Job Satisfaction
- (vi) Proper planning, organizing, directing, forecasting and controlling of activities at all levels in an organization.
- (vii) Sharpens techniques, skills, and ability in doing things or getting things done in the right manner.
- (viii) Reduce or minimize frustrations at work.
- (ix) Making choices for the things that are important and valuable to the organization that we work. Less efforts and more work done, hence more relaxation.
- (x) Increase in productivity to meet the goals of the organization

### Conclusion

Time Management is important to a well-balanced life. How we use the amount of time makes all the difference to our lives. We can create a happy family, grow businesses and realize personal goals in the time available to us if we change our life style and attitudes. Time Management takes time. It may sometimes take months and years to get our needs and wants satisfied. Time Management is a systematic application of common-sense strategies. It requires little effort, yet it promotes efficient work practices by highlighting wastage. It leads to effective use of time by focusing in our chosen activities.

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## **A Study On Work life Balance Among Women Employees With Special Reference To Swifterz Creative Services**

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### **Abstract**

The present study is confined to women employees in Pollachi city. Pollachi city is one of the developed cities of India. Women employees who have been working in different organizations covering different sectors of banking were considered for the purpose of the study. The study is carried out in prearranged public sector and private sector banks. The study confines its scope to recognize the various factors involved in the Work Life of women employees more specifically in banking sectors. More over 80% of women employees in software industry are having more health issues and also not in the position to balancing their family as well as highly pressure working environment, even though the women employee's contribution is constantly supporting for the development of software industry. The study observed long working hours, after working hours training and shifting factors are issues to the women employees for mongering the work life and affect the productivity performance of organization and individuals. The overall study has analyzed experience, salary, family [dependents, superiors supporting, procedures and policies, and other working and family environmental factors are more supporting for women employees. In this respect, the women respondents would be able to perform their and also chance to improve the performanceto organization in different dimensions included quality, productivity and profitability.

### **Introduction**

Now-a-days, work life balance is an important issue for both employees and employers generally in service industry and particularly in banking sector, where employees are overloaded with work and at the same time, they have to balance their family life (Goyal and Babel, 2015). Work life balance is the individuals satisfied in such as way they share their energy and time between work and personal and family life. The employees who are satisfied with their work life balance are energized, enthusiastic and committed to their work. Liberalization and privatization policies induce the Indian banking sector to adopt reform measures and fight for competitive edge over their competitors in a highly transformed and dynamic banking business. The entry of new private sector banks enhances the operational efficiency and competitiveness in Indian banking industry. The new private sector banks have introduced new and innovative services and products in order to capture the high market share. This changes the working pattern of the women employees in banking sector (Sethi, 2014). Managing work life balance is very important task for women that help to lead a life healthy and stable. Better work life balance facilitates in fixing priorities by women, understanding of existing work environment and position, updating their knowledge and skills, fixing time schedule for family and appraising performance. Good work life balance is not only helping women employees, but, also family and banks.

### Objectives Of the Study

This study is carried out with the following objectives

- To know about the initiatives taken by the organization for the effective work-life balance.
- To know about the initiatives taken by the women employees for the effective work-life balance.
- To identify the determinants of work-life balance of women bank employees.

### Scope Of the Study

The present study is confined to women employees in Pollachi city. Pollachi city is one of the developed cities of India. Women employees who have been working in different organizations covering different sectors of banking were considered for the purpose of the study. The study is carried out in prearranged public sector and private sector banks. The study confines its scope to recognize the various factors involved in the Work Life of women employees more specifically in banking sectors

### Limitations Of the Study

The following are the limitations of the study:

The primary data are being collected by using questionnaire, which contains its own limitations. The outcome of the study cannot be generalized as the data will be collected only from female employees and not from all employees. The study was completed in short period. Lack of time for study is another drawback.

Findings and conclusion are based on the data collected through these 100 samples, since it is a time bound the researcher did not cover all requirements. The researcher has collected data by convenient sampling by using questionnaire and there is a possibility of certain deviations.

### Review Of Literature

**Mrs. Vijayshri Rameshkumar Mehta and Rajashree Shinde (2009)**, “A Study of Work Life Balance (WLB) among Women Employees in Service Sector with Special reference to Pune City”. To identify the determinants of Work Life Balance of Women Employees. Sample size is 263 respondents. Stratified Sampling technique was adopted in this study. The statistical tools like mean, standard deviation, Correlation, Factor Analysis and Tests of Hypothesis are used for the analysis purpose. Work-life balance policies are most likely to be successfully mainstreamed in organizations which have a clear understanding of their business rationale and which respect the importance of work-life balance for all employees.

**Sana Hafiz (2017)**, “Work - Life Balance (WLB) of Women Employees in Banking Sector- with Special Reference to Kota City”. The main objective of the study is to identify the determinants of Work Life Balance of Women bank employees. 80 samples have been taken from private and public sector banks namely Bank of Baroda Bank, State Bank of India. The Stratified Random Sampling Technique has been used in order to collect the primary data. Data is analyzed using SPSS, Correlation and ANOVA test. It is manifest from the above study that women employees working in the banking industry to maintain a balance of work can have serious implications on the life of an individual.

### Table Showing Towards Age Of The Respondents

Age	No of respondents	Percent age
Below 25 years	38	38.0
25-35 years	52	52.0
35-45 years	10	10.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

The above table shows that, out of 100 respondents, 38% of the respondents are belong to the age group of below 25 years, 52% of the respondents are belong to the age group between 25-35 years and remaining 10 (10%) of the respondents are belong to the age group between 35-45 years. Hence, it could be inferred that 52% of the respondents are belong to the age group between 25-35 years.

#### Chi – square analysis

Chi-Square Tests			
	Value	df	Sig. (2-sided)
Pearson Chi-Square	25.238 <sup>a</sup>	3	.000
Likelihood Ratio	27.043	3	.000
Linear-by-Linear Association	2.883	1	.090
N of Valid Cases	100		
a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.40.			

Calculated  $\chi^2$  Value:

25.238

Degree of freedom: 3

Table Value: Five per cent level: 7.815

#### Interpretation

Since the calculated  $\chi^2$  value (25.238) is greater than the table value (7.815). Therefore, it is concluded that there is a significant association between balance our work and family commitments and positive impact over work life balance. Hence, Null hypothesis is rejected.

#### Findings

- 52% of the respondents are belong to the age group between 25-35 years.



- The majority 76% of the respondents are belongs to nuclear family.
- 60% of the respondents are working in participative atmosphere in the organization.
- The majority 62% of the respondents are working in less than 6 hours per day.
- 82% of the respondents are comfortable and happy with the timings of the organization.
- 72% of the respondents have sometimes time spend for family and friends.
- The majority 66% of the respondents are said organizations makes some programs to manage our work life balance.
- 34% of the respondents have make job rotation programs to manage our work life balance.

### Suggestion

Most of the married women employees' respondents are feeling that work life balance both organizational and personnel issomewhat high, since the married women employees are not in position to managing their work and life. Therefore, the organization has to organize lead the work life balance programs with ambulant trainer, psychologist, and human resource managers. The most of the women employees having two kids are not in the position to balancing the work and family and also therespondents will have more emotional and stress problems.

### Conclusion

Work and family life have been an integral part of a woman's life. These two together forms an integrated whole and therefore attracts a lot of attention. The need to study the inter-linkages becomes all the more important with an increasing number of women entering the formal labour market. The performance of the banking sectors is behind only with the efficient employees especially the women banking employee's knowledge play a very vital part for the development of Indianbanking industry in global market. More over 80% of women employees in software industry are having more health issues and also not in the position to balancing their family as well as highly pressure working environment, even though the women employee's contribution is constantly supporting for the development of software industry. The study observed long working hours, after working hours training and shifting factors are issues to the women employees for mongering the work life and affect the productivity performance of organization and individuals. The overall study has analyzed experience, salary, family, dependents, superiors supporting, procedures and policies, and other working and family environmental factors are more supporting for women employees.

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### **KMC and KIC its effects on organizational Effectiveness in supply chain management and logistics sector**

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### Abstract



This study intends to investigate the effects of knowledge management capability (KMC) on organizational learning (OL), organizational Effectiveness (OE), and supply chain management practices (SCMPs.) Design, methodology, and approach the management teams of the logistics companies self-administered a questionnaire to collect the data. 202 questionnaires in all were gathered, and 183 replies were used to create the data 1. The respondents were people who had managerial or supervisory experience and whose work titles or responsibilities included managers, heads of departments, owners, chief executive officers, senior executive officers, or, at the absolute least, assistant managers or supervisors. to look into the relationships between all the components (e.g KMC, OE, SCMPs and OP),

This study made use of a structural model, reliability and validity testing, correlation analysis, and other analysis methods. Findings showed that KMC is favorably connected to OE, has a beneficial impact on SCMPs, and is substantially correlated with all three. OE has a favorable relationship with both OE and SCMPs. Limitations and implications of the research the findings of this study add to the expanding body of literature that connects KMC with SCMPs, OE. The results shed light on the value of OE and knowledge management in enhancing SCMPs inside businesses. The results can therefore be used to give insight on how decision-makers can develop SCMP policies that will ultimately improve the OP.

### **Introduction**

Organizational effectiveness includes the outcome of knowledge management capabilities, such as improved coordination of effects, the rapid commercialization of new products, the ability to anticipate surprises, and responsiveness to supply chain market changes in logistics sector.

### **Research Motivation and Purposes**

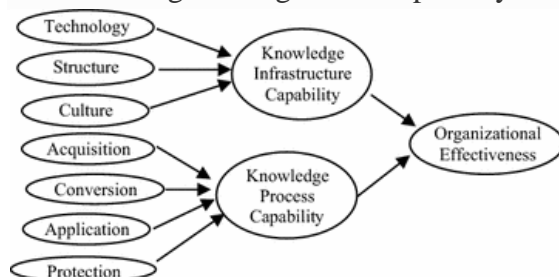
Because the value of KM practices is well recognized around the world, there are limited empirical investigations on the relationships between KMC and organizational effectiveness. A recent study by Gold et al. (2001) shed light on the relationships between KMC and organizational effectiveness. According to their study, KMC can be accessed via two major constructs: the knowledge infrastructure capability (KIC) and knowledge process capability (KPC). The results disclose the positive relationships between KPC and organizational effectiveness and between KIC and organizational effectiveness.

Additionally, as De Angelis (2013) state, the public sector is influenced by a growing need for: “competition, performance standards, monitoring, measurement, flexibility, emphasis on results, customer focus and social control”. However, there are fewer studies focusing on public sector KM than those focusing on KM in the private sector (Oluikpe 2012, Ringel-Bickelmaier and Ringel 2010), even though “KM initiatives have always been integrated in government tasks, inseparable from strategy, planning, consultation, and implementation” (Riege and Lindsay 2006). Most studies on either KM Knowledge infrastructure capability (KIC)

Knowledge infrastructure capabilities (KIC) are required to build and maintain generic capabilities that are shared with organizational activities and functions. According to the study by Gold et al. (2001), knowledge infrastructure capabilities can be assessed through three major constructs:

structural infrastructure, technical infrastructure, and cultural infrastructure. This study adopted items to measure the three constructs of knowledge infrastructure capability; the descriptions are as follows. KMC generally use private organizations as research subjects and rarely perform empirical studies of public utilities. This gap leads to the initial research motivation of this study, which is

to consider whether the previously discussed relevant studies can be applied to logistics sector Knowledge management is Knowledge management (KM) and knowledge management capability (KMC) and Organization Effectiveness in supply chain management in the logistics sector the employment and development of the knowledge assets of an organization to achieve the organizational goals. This knowledge consists of both explicit and implicit knowledge (Theriou and Chatzoglou 2008). Knowledge management involve the creation, manipulation, storage and sharing of knowledge among people in a community of practice. Knowledge management manages the knowledge flows in an organization (Hislop 2013). To enhance organizational performance, knowledge management strategies must be incorporated and implemented so that the organization attains a competitive edge. Organizations that are skilled in knowledge management consider knowledge to be human capital and have developed organizational rules and values to support knowledge production and sharing (Metaxiotis et al. 2005; Meyer et al. 2002). The study on Knowledge management Capability and Organization Effectiveness



### Research Suppositions

Organizational effectiveness and knowledge infrastructure capability are related.

Infrastructure serves as the foundational system for organizational operations. According to Longman and Mullins (2004), a sound organizational structure affects how well a project is implemented. Combining infrastructure capabilities with other organizational resources produces synergy in organizations (Melville et al. 2004). Building and maintaining organizational capabilities as well as sharing skills with other functions both within and beyond organizations require infrastructure. By coordinating and managing strategies across divisions and business units, KIC competencies are crucial to supporting organizational activities. Furthermore, earlier studies have demonstrated that KMC affects organizational performance, including those by Gold et al. (2001), Lee and Choi (2003), Gosh and Scott (2007), Zack et al. (2009), and Emadzade et al. (2012).

### Hypothesis 1

Knowledge infrastructure capability has a significant positive effect on organizational effectiveness and its supply chain management in logistics sector

### **Interrelationship between knowledge process capability (KPC) and organizational effectiveness**

The knowledge management processes are in the literature mentioned as the knowledge management practices. It is an interrelated set of various business processes developed in an organization to create, store, transfer, and apply the knowledge. Knowledge management practices the first stage is knowledge acquisition, knowledge creation, knowledge storage, knowledge distribution, knowledge use, and knowledge maintaining (Patrick and Sonia 2009). Knowledge process capability improves organizational processes such as innovation, collaborative decision-making and individual and collective learning (King 2009).

#### **Hypothesis 2**

Knowledge process capability has a significant positive effect on organizational effectiveness and its supply chain management in logistics sector

### **Interrelationship between knowledge management capability (KMC) and organizational Effectiveness in logistics sector**

Nowadays, it is completely accepted that human resource is the main element in knowledge management productivity (Zahedi and Tejari 2008). Many empirical research results have showed that KM have great influence on organizational outcomes in terms of innovation, product quality, and improvement of employee's morale (Alzoubi and Alnajjar 2010; Sireteanu and Grigoruta 2007; Pentland 2003). Creation of a favorable work environment and securing high levels of trust among employees and employer-employee relationships are crucial factors in knowledge sharing (Kurtoğlu 2007). In order to avoid losing the qualified employees or to minimize prospective loss of leaving employees organizations must transform the individual knowledge possessed by the employees into organizational knowledge. Rendering organizational commitment among employees is one of the most important ways. Alzoubi and Alnajjar (2010) studied KM architecture tested a set of variables related to Knowledge management revealed that the pillars of knowledge management architecture consist of strategy and commitment, information systems, culture, and communication. Knowledge management requires a major shift and commitment of everyone in the organization in adopting each factor of knowledge management to make it works (Gupta et al. 2000). Working together as a team on various projects has developed a good culture and commitment among auditors that encourage knowledge application and dissemination.

#### **Hypothesis 3**

Knowledge infrastructure capabilities have significant positive effects on organizational effectiveness and its supply chain management in logistics sector

#### **Hypothesis 4**

Knowledge process capabilities have significant positive effects on organizational effectiveness and its supply chain management in logistics sector

Interrelationship between organizational commitment and organizational effectiveness in logistics sector

Organizational commitment is a critical construct for any organization to succeed. Employee commitment is seen as the key factor in achieving competitive performance (Sahnawaz and Juyal 2006). Meyer et al. (2002) defined commitment as a force that binds an individual to a course of action that is of relevance to a particular target. When employees, as noted by Okpara (2004) and Warsi et al. (2009), believe that they will grow and learn with their current employers, their level of commitment to stay with that particular organization is higher. To allow employees to improve their job efficiency, there is a significant need for strong and effective human resource strategies. These strategies must enhance employees' commitment to their career and organization, reduce turnover intentions and make organizational politics favorable to all employees. If the employees do not understand the company culture, cannot fit in or lack a sense of identification, they will choose to leave their organization (Autry and Daugherty 2003).

### Hypothesis 5

Organizational effectiveness is greatly enhanced by organizational commitment.

#### 5a Hypothesis

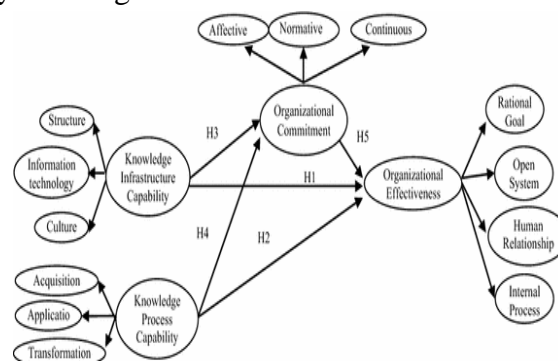
The knowledge infrastructure capabilities and organizational effectiveness are significantly mediated by organizational commitment.

#### 5b Hypothesis

The knowledge process capability and organizational effectiveness are significantly mediated by organizational commitment.

### Research Design

This study contents that KIC and OE are predictors of organizational commitment, according to Gold et al. (2001). Organizational commitment also promotes, enables, and supports the effectiveness of the organization. By framing organizational commitment as a mediator between KIC/OE and organizational effectiveness, this study uses a mediating paradigm to support its claim. 3. The predictor factors among these are KIC and OE, the mediating variable is organizational commitment, and the outcome variable is organizational effectiveness. This study looked into if there are any meaningful links between these variables.



### Variable definitions and measurement

The operationalization of the four main aspects of this study are as follows: (1) knowledge infrastructure capability, (2) knowledge process capability, (3) organizational commitment, and (4) organizational effectiveness. For this study, a survey questionnaire will be created. Table 1 provides an illustration of the operational definition, measured variables, and sources of the

measured dimensions in this study's questionnaire. A 5-point Likert scale is used to measure the variables, with 1 signifying strong disagreement and 5 denoting strong agreement.

### **Methods of data analysis**

In order to test the hypotheses, this study use SPSS 20.0 and AMOS 18.0 software as major tools to help us analyze the collected data. To test the hypotheses, the following data analysis methods would be pretested.

#### **a. Normality and extreme value testing**

Using the AMOS normality and extreme value tests, to understand whether a given sample set of continuous (variable) data could have come from the Gaussian distribution (also called the normal distribution).

#### **b. Questionnaire pre-test**

Content validity and Expert Validity were conducted, to test the adequacy of the measurement tool content and evaluate the apparent validity using the judgment method.

#### **c. Descriptive statistical analysis**

To better understand the characteristics of each variable, descriptive statistical analysis was used to illustrate the means, and standard deviation of each research variable. Furthermore, to identify the variables that have significant discrepancies for each dimension, an independent *t* test was conducted.

#### **d. Common method variance testing**

Harman's one-factor test and early and late respondent significance test were conducted, to test CMV problem and non-response error.

#### **e. Measurement model testing**

A part of the entire structural equation model (SEM) process, which is an analogous to the factor analysis, including all dual items, variables, or observations that "load" onto the latent variable as well as their relationships, variances, and errors. Using both an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA) to assess construct validity.

#### **f. Structural model testing**

First, testing the relationships between different variables. Then, the SEM analysis of the latent variables was conducted, and the empirical analysis of the mediating effects also began with the evaluation of the overall measurement model and then used bootstrapping as the testing method. The sequence of analysis mentioned above ensured that the measurements were valid and reliable before attempts were made to draw conclusions about the relationships between the constructs. Whether a contribution has been made to the current body of knowledge and whether the research objectives have been achieved will be discussed in the summary.

## **Conclusion**

This study chooses supply chain management in logistics sector as the research subject. This study therefore contributes to extending the strategy of KMC to the analysis using the employees' perspective in logistics sector. The results of this study provide managers with insights into how



to allocate organizational resources and how to improve their organizational effectiveness when deciding on which KMC strategy to adopt.

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### Impact Of Covid 19 On ALS Sector

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### Introduction

Supply chain disruptions can occur because of human-made disasters and natural calamities. Globally, several instances happened beyond consisting including Gujarat Earthquake (2001), the tsunami in Japan (2011), the Indian Ocean earthquake, and the tsunami (2004). Further, the outbreak of infectious sicknesses, Corona Virus disorder 2019(COVID-19) has introduced an international tragedy now not best for human lives, but additionally for your price range sports like manufacturing operations, supply chain and logistics, and several different sectors. The COVID-19 pandemic has seriously Impacted the automotive area, tourism industry, aviation industry, oil enterprise, construction industry, telecom Region, meals industry, and healthcare industry. Initial instances had been stated in December 2019 and viewed as signs of pneumonia in the wet Markets of Wuhan city in Hubei Province, China, and later named COVID-19.

The point of interest of the governments of numerous international locations is to stop and manage the community transmission of COVID-19 such that excessive damage can be restrained, However, a dynamic transmission of coronavirus infection makes it a laborious challenge. The unavailability of a clinical cure and putting off developing the vaccine similarly makes the state of affairs worse than it has ever been in recent times. Meanwhile, the remedy is symptomatic, and oxygen remedy represents the number one remedy intervention for patients having an excessive infection. Mechanical ventilation canbe important in cases of respiratory failure to offer oxygen therapy, and further, hemodynamic help is essential for handling septic shock. The provision of such centers islikewise limited, and it becomes fairly difficult to fulfill the requirement, in particular, while a lockdown is enforced around half of the globe. The lockdown was imposed in several nations to govern the fatalities and lack of physical health, and about 2.6 billion people



have been home quarantined in India, the United States of America, South Africa, Philippines, at the side of other international locations inside March and April of the year 2020.

Lockdown gives upward push to a scarcity of labor force and logistics disruptions, in the end, resulting in supply facet shocks to the food delivery chain. Furthermore, it brings an unexpected surge in the call for facet of food supply chains because of the panic buying and hoarding behavior of humans. Except it, the lockdown significantly crippled the economic system and carries the arena to a screeching halt state of affairs.

### Review Of Literature

Mehrotra et al. presented a multi-period stochastic programming model for allocating the inventory of ventilator in the COVID-19 pandemic for the U.S.A. by generating four different types of demand scenarios. A mixed-integer programming (MIP) model has been proposed for controlling the Ebola Virus diseases in West Africa by considering the logistics issues over a multi-period planning horizon to minimize infections and fatalities within the constrained budget. **Liu et al.** He outlined a mixed-integer non-linear programming (MINLP) model to control the spread of the Swine flu (H1N1) in China by optimally allocating the emergency budget as per infected individuals and available capacity. **Zlojutro, Rey, and Gardner** They introduced a decision support framework by developing a stochastic model of multi-commodity network flow and passenger movement through air travel that causes the spread of the virus. In the study, border control strategies have been established at an immature stage by curbing travel with the needful allocation of the outbreak control resources in a planned manner. **Olivares-Aguila and Elmaraghy** They proposed a dynamic model for evaluating the service level of the supply chain in distinct scenarios by acknowledging partial and full disruptions. An analytical model of a flexible production system has been developed to examine the sequence of loading or unloading operations using autonomous mobile robots for enhancing the productivity and flexibility of the system. A study suggested strategic planning of the logistics challenges and sales loss during strong, medium, and mild scenarios effect.

### Food Supply Chain

All forms of meal delivery chains were severely affected during the COVID-19 pandemic, for example, fresh veggies, fruits, bakery objects, perishable items, and in the end, meal grains. Shortage of meal items is unavoidable in any such strict lockdown wherein most of the logistics activities were stopped.

Formerly, Manning, Baines, and Chad addressed the effect of organic infections in the meal delivery chain on a local basis, and National and worldwide meals infection problems such as meals terrorism. Due to the risk of getting infected, human beings had been prevented from ordering food from an internet Platforms like Zomato and Swiggy.

For the survival of humans, PDS is run with the aid of the Government of India to make sure food safety for approximately 800 million humans from the weaker segment at an inexpensive rate, especially wheat and rice, the principal substances of the Indian food regimen. On average, forty–42 million lots of food grain are transported in a year by using the FCI (2020). Surplus states played a great position in satisfying the call for deficit states. For wheat, Punjab, Haryana, and Madhya

Pradesh, and in rice procurement, Punjab, Haryana, Andhra Pradesh, Telangana, Chhattisgarh, and Odisha are the surplus states.

The food grains are dispensed to needy people (customers) at fair price stores (FPS) positioned in rural as properly as in city regions. In a lockdown, several sorts of concerns related to transportation services (vans and neighborhood delivery), like the absence of loading and unloading labor and the shutdown of offices are faced via the PDS network. The impact of lockdown can be visualized from the operation of 10% of vehicles out of one.4 million (medium and lengthy haulage), and comparable is the case for mild commercial automobiles (Nandi 2020). Some other difficulty of facility failure is precipitated due to excessive infection in some of the areas which have been declared as pink or containment zones. Difficulties had been advanced in attaining the favored reason of deliver chain due to uncertainties in vehicle availability and labor shortage. Furthermore, the evaluation of diverted routes has been converted as a problem because of changing situation at warehouse and logistics activities. Therefore, a simulation model of the PDS is validated in this paper underneath a pandemic state of affairs with the aid of thinking about three distinctive scenarios, as given within the subsequent segment.

### **Consequences and discussions**

The present observation focuses on mitigation techniques to manipulate disruptions inside the logistics system of the food and healthcare supply chain. Disruptions and the mitigating function of a backup facility within the food supply chain during a pandemic have been validated using the case of the PDS in India. The key performance indicator to assess deliver chain overall performance of PDS is anticipated lead time. Outcomes of the simulation version below three exclusive situations have been mentioned in this segment.

### **Conclusion and future scope**

Natural calamities, threatening diseases, or political issues are the key elements that purpose supply chain disruptions as observed in the past. However, the outbreak of the COVID-19 pandemic has been pronounced as a remarkable case that has a pernicious impact globally due to the suspension of just about all the producing and logistics sports. In this paper, an action plan has been proposed to address the pandemic primarily based on disruptions for fulfilling the need for food grains, ingredients, medicine, PPE, and different vital items. An idea of the truck drone synchronized transport machine has been described to attain out to the patron residing in high-upward push constructions positioned insignificantly infected areas. Disruptions within the food grain delivery chain of the PDS have additionally been studied that happened due to the no longer functioning supply warehouse due to the dearth of labor and truck drivers in inflamed areas.

Consequently, a simulated take a look at is fashioned through designing 3 distinct scenarios of the PDS to expose the effect of the pandemic and its reviving strategy. Results confirmed the integration of warehouses facilitates reaching demand fulfillment from a backup ware residence for the duration of disruptions at an allocated warehouse. The awareness of this paper is confined to researching COVID-19 situations via emphasizing crucial activities of supply chain and logistics structures, especially in the case of the public distribution community. In destiny research, a detailed

version of the public distribution network and food delivery chain can be evolved by incorporating multiple elements and challenges.

Moreover, mathematical and statistical strategies can be adopted to supply rigour- primarily based analysis to seize issues of the meals supply chain, manufacturing of vital items, and shortages of the healthcare system as destiny scope for the researchers of this domain to fight the pandemic worries.

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## **Iot IN ALS Sector**

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### **Abstract**

Internet of Things (IoT) is rapidly growing around the world. IoT is implemented with the dream of everything would be bigger, faster, and cheaper. The Aviation industry affects the reflection of those dreams. For innovation in supply chain and logistics, IoT applications will introduce different promising concepts and designs. With minimal efforts and new possible roles, logistics with greater accuracy of execution can be achieved. The Impact of logistics on IoT will have a greater impact on various areas such a safety and security, customer experience, operational efficiency, and new business models in logistics. Based on the grounded theory, use in the supply chain of the Australian retail industry.

### **Introduction**

The Internet of things is an extension of internet connectivity into physical devices and everyday objects. It is simply the network of interconnected things and devices which are embedded with software network connectivity sensor and necessary electronics that enables them to collect and exchange the data making them responsible. It means taking all the things in a world and connecting them to the internet. In 1999 Kevin Ashton introduced the term Internet of things. He was the father of IoT.

### **Applications of Iot**

Some of the applications of IoT are Aviation, Logistics, Supply chain management, Smart homes, Smart City, Retail, and Wearable technology, etc.....

### **Work of Iot**

IoT application works with the smart system that automates the task to address the specific needs and wants of the users. The devices often called connected or smart devices can sometimes talk to other related devices this process is called machine-to-machine (M2M) communication and action on the information they get from one another. These devices transfer and collect a large amount of internet about how they work and the details about the information they store.

### **Benefits of Iot**

Improved safety and security-protects against physical threats, efficient processes-reduce inventory and time to market, increase business opportunities-advanced business models and services, Enhanced asset utilization-improve tracking of assets, cost saving-drive down maintenance costs, increase productivity-increase organizational productivity.

### **Aviation Sector**

Aviation in India is divided into two types namely military and civil aviation. It is the fastest growing market in the world according to the international air transport association (IATA).

### **IoT In Aviation**

The various reasons for the aviation industry are smooth travel, tourism, and international travel. It creates job opportunities for economic growth across the nation. IoT has changed the method of the industry as connected devices and sensor-based systems.

### **Applications of IoT in Aviation Industry**

#### **1. Aircraft Safety**

To track airplane velocity, airplane angle, and weather conditions, connected to a central system. Sensors help the devices communicate to each other as well as be monitored by the concerned authorities. It works significantly work by transmitting the data and generating communication in the case of inconsistency in any part of the plane.

#### **2. Climate Control in Cabin**

Temperature detection-based sensors can be equipped with airplanes to manage a smooth experience for passengers. The Sensor is placed in the cabin all over the area based on the location, weather forecasting and the temperature inside the cabin will be maintained.

#### **3. Managing Traffic**

The planes were already tracked of their real-time location and maintained communication. To take it a level ahead, the planes can be made to be tracked down via a system of the times arrival and departure to be able to see for the availability and pauses on the runways. It also provides for tactics of speed monitoring, and timing rescheduling to facilitate smooth movement.

#### **4. Improvement in Passenger Experience**

Airline companies have their updating portal for the passengers to use and own applications. Customers can get details and plans about finding the right gate, getting alerts about departure times and any change in schedules, customizing the in-flight experience, and personalized recommendations based on previous choices.

#### **5. Effective Maintenance**

IoT can provide a good alternative to track the existing conditions and air conditions of the arrived planes to make the best out of the maintenance practices, and also of their various parts. Informational data can be transmitted to the concerned engineer way before to prioritize which maintenance function to perform first and on which aircraft. It can provide real-time information about the parts and the kind of maintenance they need.

**Example**

The Airplane Connected Experience seeks to keep the airplane cabin connected. IoT helps the cabin crew to get real-time updates about seat positions, bathrooms, shortages, food availability, etc. enabling them to provide the best services to the passengers using collected data.

**Logistics**

Logistics managers are referred to as logisticians. Logistics refers to the overall process of managing resources that are acquired, stored, and transported to their final destination. It involves identifying supplier prospective distributors and determining their accessibility and effectiveness.

**Major Aspects of Connected Ecosystem In Logistics**

- Communication system
- Monitoring of supply chain
- Cyber security
- Location tracking

**Application of Iot on Logistics****End-to-end delivery tracking**

It is equally important to create user-friendly web dashboards that display the data. In logistics, one of the biggest challenges is to integrate each and every stage of supply chain management into a single application. IoT platforms implement a lot of changes in flexible functionality. They allow specific persons to collect the operational data powered by IoT sensors and devices.

**Inventory tracking and warehousing**

The ability to track warehouse and inventory helps to run the business successfully. It will help us to identify the materials, finished goods, progress in work, and all the relevant data. From the information captured throughout the process of production, it can help to efficiently deliver products to meet customer demands. Smart warehouse management ensures to store of goods in an effective way.

**Autonomous and self-driving cars**

IoT industry has introduced the concept of autonomous vehicles. Artificial Intelligence (AI), Machine learning are new-age technologies, IoT is for the implementation of self-driving vehicles in logistics, they make sure the safety of truckers and cargo. The integration of technologies has led to transparency and visibility into operations with smart driving routes and directions. It is set to transform the driving experience with relevant data and useful insights.

**Example**

Natural gas industry, logistics involve managing the facilities, distribution centers, pipelines, trucks, and storage that handle oil and transformed along the supply chain. It needs an efficient supply chain, and logistical procedures to reduce costs and increase efficiency. In case of poor logistics, the business leads to untimely deliveries, and the needs of the client, and ultimately causes the business to suffer.



### **Supply Chain Industries Sector**

Supply chain industries deal with businesses and locations based on the flow of goods and services. It is a combined network of individuals, organizations, resources, activities, and technology involved in the manufacture and sale of a product or service. It is an integrative process.

### **IoT on Supply Chain Industries**

Identification of issues in the supply chain industries is rectified by the stakeholder using real-time shipment and inventory, visibility, and tracking. The Supply and demand of a product are noticed by the stakeholder. It helps us to keep better quality management due to keeping raw materials and processed goods in optimal conditions.

### **Application of Iot on Supply Chain**

#### **Authenticate the location of goods at any time:**

IoT devices can connect with storage containers or raw materials or products. It also allows the device to transmit its location. GPS satellite helps to track the movement of goods.

#### **Track speed of movement and when goods will arrive**

Tracking speed helps us to predict easier how goods will move through the supply chain. Manufacturers, Suppliers, and distribution centres can prepare to receive goods, which reduces handling times and also ensures the efficient processing of materials.

#### **Streamline the problematic movement of goods**

IoT device helps us to know the goods tracking and route planning. So that we can easily identify goods are delayed in transit. It allows for alternative routes and contingency planning to speed up the supply chain.

#### **Example**

Colgate products are sold in many venues such as pharmacies, supermarkets, convenience stores, and small wholesalers. It creates an excellent impact within their distribution channels and management.

### **Conclusion**

In this connected world aviation is a significant necessity for the people. To take service consumerism which is growing seeks to have more convenient ways. For the smooth function of the cabin crew and passengers' technology especially IoT always helps in making them. The Goal with accuracy and technology to give the customers a personalized and safe experience. Taking business to the next leap integrated solutions of IoT lead to data security and ability. Operational efficiency can unlock higher levels of technologies. IoT applications in the field of logistics enhance the customer experience and provide a hassle-free experience and also. It also provides transparency control throughout supply chain management.

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## GIG Economy to the Millennials

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### Abstract

The Post-Covid economy is volatile and unpredictable, driven by automation and artificial intelligence, with inventive inventions coming up in response to the pandemic. The economy is undeniably in jeopardy, but Covid has prepared the road for all new developing trends. Tina Brown, a former New Yorker editor, coined the term "Gig economy" in 2009. A gig economy is a form of free market where businesses frequently hire temporary employees for short-term contracts. Through digital platforms, the gig economy links independent contractors with clients to provide brief services or asset sharing. However, it prompts questions regarding worker and consumer rights. New fields of study including the platform economy and gig economy have emerged as a result of the digital revolution, sometimes known as the digitalization of the economy. Because millennial is more likely to absorb technology and adapt fast, the rise of technology has significantly influenced the gig economy. In the research, potential changes brought on by a gig economy are hypothesized.

### Introduction

The gig economy is the collection of markets that match providers to consumers on a gig (or job) basis in support of on-demand commerce. In the basic model, gig workers enter into formal agreements with on-demand companies (e.g., Uber, TaskRabbit) to provide services to the company's clients. Prospective clients request services through an Internet-based technological platform or smartphone application that allows them to search for providers or to specify jobs. Providers (i.e., gig workers) engaged by the on-demand company provide the requested service and are compensated for the jobs [1]. Employment in the gig economy undermines the popular assumption related to human capital at work. The research results tentatively indicate that an employee with high or specialized skills is no longer the most desirable worker. A gig economy typically means micro tasking, i.e., work fragmentation into simple activities that can be easily codified.

### The Rise of Digital Currencies

Bitcoin and crypto currency are set to revolutionize the world of payment and employment. Cryptocurrencies are based on block chain technology, Blockchain is a digital technology that stores and records transactions across multiple. The upsurge of the gig economy has not gone undetected by the block chain ecosystem, and a number of block chain-based platforms that seek to depoliticize the freelance bidding process are now sprouting up. Cryptocurrency is a type of digital payment that can be exchanged for goods and services. Many businesses have created their own currencies, known as cryptos, that can be exchanged for the goods or services that the business provides. Users must first exchange real currency for cryptocurrency in order to gain access to the good or service the gig economy might very well fuel the upsurge of cryptocurrency, by allowing small businesses to work cross-border without the hassle of payment, not to mention the currency values that vary by country. One world, one currency may be a myth, but cryptocurrency is one of the major changes that a gig economy could bring about, and with millennials and Generation Z being tech savvy, a significant change could eventuate in the world of payment.

### **Economy For Startups**

Niche markets will revolutionize the market. The gig economy and gig market may pave the way for previously unexplored industries. leading to a new world for start-ups, while perfect competition could be dimension. Traditional business strategies may be antiquated, and new technology and innovation may shift the market, resulting in a plethora of potential innovators and fewer laggard. Organizations are being forced to reorganize their efforts as a result of the pandemic. Companies typically begin with cost reductions; businesses may choose to cut costs by spending less on marketing and gig economy. As a result, marketers have chosen to focus on new strategies such as customer retention.

### **Solubilization**

Solubilization, or the slowing of globalization, is thought to have begun during the 2008 global economic crisis and has lately gathered prominence. The covid 19 pandemic has significantly reduced international trade in goods, services, technology, capital and people, prompting columnists to declare the commencement of solubilization. The ability to exist and develop without depleting natural resources for the future is termed to as sustainability.

### **Changes In the Taxation Rates**

Taxation and tax reform can be critical to a country's economic success and advancement Of country s progress. Tax policies are highly probable to play a critical role in the country's gradual economic recovery, post covid 19. Taxation entails everything the government does, and policymakers frequently use it to try to shape the economy. future of taxation might be digitalization and automation, using technology or artificial intelligence. Following Covid 19, economists agree with the outcome of a wealth tax.

The wealth tax is not the bait to cover the government's stimulus package provided during the pandemic. A more sustainable form of tax reform is required, one that does not suffocate the poor

and does not place an undue burden on the wealthy, However, one of the most pressing issues that must be addressed is the clear indication that, as a result of the pandemic, many people in the vulnerable sector have lost their jobs, and developing economies must account for this, when imposing taxes.

And, as the gig economy becomes more prevalent, taxing policies will undergo significant changes. For a more established business owner—one who earns significant income, has an established book and record keeping system, and likely employs an accountant—the current business tax regime may be appropriate. But that regime is a mismatch for lower-income and potentially unsophisticated gig workers. Subjecting them to tax compliance rules aimed at traditional sole proprietors is not only burdensome but also likely leads to lower tax compliance, which in turn leads to less revenue for the government. It is also inefficient, as individuals spend hours of time navigating complex tax rules to report relatively low amounts of income.[3].

### **Sustainable Development and Employment**

The most pressing issue we face is determining how we will achieve our sustainable goals by enabling the gig economy. The next question is whether we can promote the gig economy in order to create a more sustainable environment. And the solution could be a sustainable gig economy. The future may see enormous trends that promote sustainability at its best by utilizing cutting-edge technology and artificial intelligence.

### **Conclusion**

The gig economy offers flexibility and shorter working hours, despite economists' warnings that labor bargaining power and labor rights may be jeopardized, and there is an urgent need for government regulations and policies in the gig economy, While the gig economy will not last forever, the platform economy may be replaced by robotics and artificial intelligence. Economics is the study of human wants, but instead of prioritizing wants, humans should be prioritized.

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## Strategic management on ALS

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### Abstract

The propose of this study is to understand the management skills and technique which were. Involved in the aviation logistics and supply chain management. Apart from that what were the strategy where available and how they used in their term and how they utilize from that, major role and makes turning point of the work done. In this we detailed about the strategy of ALS and how it works under procedure.

### Need of the study

To understand about aviation, logistics and supply chain management

How the strategy is available in ALS

The important of technology through ALS and steps involved in it.

### Introduction

In this competitive world we should utilize some strategy to overcome other barriers. Likewise in this paper we are going to know about ALS which is commonly known as AVIATION, LOGISTICS AND SUPPLY CHAIN MANAGEMENT and some strategy which is commonly used in it. The role of ALS is more important for the business concern or organization or people.

### Aviation

Aviation is the activities surrounding mechanical flight and the aircraft industry. The main job of aviation which offers works like technician, aircraft manufacturing engineer, air pilot, airport, operation, manager, air traffic controller, aviation maintenance technician as well as quality control personal

The aviation industry truly indicates that the business sector dedicated to manufacturing and operation all types of aircraft. In 1799, the man “Sir George Cayley” is popularity known as “father of aviation”

There are certain types of aviation which is broadly classified under.

Commercial aviation, general aviation, military aviation.

### Commercial Aviation

Commercial aviation involves money or funds in it the main purpose of commercial aviation is the export import of things from one place to another.

**For ex:** Air India, Indigo, Go First.

### General Aviation

General aviation means that the aviation where all the non-scheduled are not operated by the commercial airlines or military for general aviation, we need to get the PPL which is commonly known as (private pilot license) and the safety standards aren't as quite as high as those for commercial pilots

**For ex:** Business or pleasure flight

Fighting forest fires

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Airborne law enforcement

### **Military Aviation**

Military aviation comprises military aircraft and other flying machines for the purpose of conducting or enabling aerial warfare, including national airlift capacity to provide the logistical supply.

**For ex:** Bombers, fighters, transports, trainer aircraft.

### **The strategic**

They are certain strategic used to uplift the aviation business.

ASP (Airport strategic planning) which is mainly focuses on the development of plans for the long-term development of an airports.

Airport Strategic Planning (ASP) mostly focuses on the development of plans for the long-term development of an airport. The dominant approach for ASP is Airport Master Planning (AMP). The main aim of AMP to give a full-fledged blueprint for how the air ports should be in upcoming years and how it can get there. Master Plan is a static detailed blueprint based on specific assumptions about the future, the plan which performs poorly comparing to our real life it is well known as different from which we assumed. With the recent dramatic changes occurring in the context in which an airport operates (e.g., low cost carriers, new types of aircraft, the liberalization and privatization of airlines and airports, fuel price developments, the European Emission Trading Scheme), the uncertainties airports face are bound to increase., There is a must need for finding new tracts to deal with uncertainty in ASP. An alternative direction is to develop an adaptive approach that is flexible and over time can adapt to the changing conditions under which an airport most operate. Three adaptive alternatives to AMP have been discussed in the literature.

This paper explores these three alternative approaches. Based on this, it concludes that these approaches are complementary and that it might be worthwhile to combine the three into a new, adaptive approach to ASP.

A design that integrates the key ideas from the three alternative approaches is presented and illustrated with a case based on Amsterdam Airport Schiphol.

### **Logistics**

The word logistics is mainly referring to what happens within one company, including the purchase and delivery of raw materials, packaging, shipment and transportation of goods to distributions.

The term logistics are mainly classified under five types.

Inbound logistics, outbound logistics, reverse logistics, third party, fourth party.

### **Outbound logistics**

Outbound logistics focuses on the demand side of the supply- demand equation. There are different steps involved in order fulfillment, packing, shipping delivery and customer service related to delivery.

### **Inbound logistics**

Inbound logistics is the way material and other goods are brought into a company.

In this step include order, receive, store, transport and manage incoming suppliers. Inbound logistics forces on the supply part of the supply- demand equation.

### **Reverse logistics**

Reverse logistics encompasses all operations related to the upstream movement of products and materials.



It is the process of moving goods from the typical final destination for the purpose of capturing value or for the purpose of proper disposal.

There are five Rs of reverse logistics, are returns, reselling, repairs, repackaging and recycling.

### **Third party logistics**

A third-party logistics which provides offers outsourced logistics service, which encompasses anything that involves management of one or more facets of procurement and fulfillment activities.

The major third-party logistics are transportation based third party, warehouse, distribution, managed transportation, financial based third-party logistics.

### **Fourth party logistics**

Fourth party logistics, also commonly known as 4PL is an operational model in which a business outsource. It's entire supply chain management and logistics to one external service provider.

**For ex:** The company were having a contract with the logistics supplier man to handle the shopping and storage the product of organization across from the southern United States.

Logistics strategy looks at four different levels of an organization.

Strategies, structural, functional, implementation, transportation, outstanding, logistics system, completions, information, strategy review.

Strategic

### **Supply chain management**

The supply chain management which handles the entire flow of production in goods and services.

It starts from the raw components till the final product, the supply chain management plays a key role.

There are five steps involved in SCM

Supply planning, production planning, inventory planning capacity planning and distribution planning.

There are four stages

Integration, operations, purchasing and distribution are the elements of.

The seven functions of SCM

Purchasing, manufacturing, inventory management, demand planning, warehousing, transportation and customer service. In SCM they mainly focus on the strategies which is

Information, inventory, cash- flow, upstream, downstream, value, distribution, logistics.

### **Conclusion**

Through this paper we can understand some stories and how they are useful in different phases. Upcoming years strategy plays a key role in each and every organization. try to learn more about this by this paper.

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## **Proprietors Experience on Business Work from Home During Pandemic Period**

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### **Abstract**

A business doing from whose primary office is in the owner's home. The business can be any size or any type as long as the office itself is located in a home. About half of home offices are located in a spare bedroom, which hopefully has a relatively soundproof door. This study has done to analyze the factor to get success when doing business from home and to know the problems faced while doing business from home. To reach the objectives of this study, the researcher has included 84 respondents and used simple percentage analysis and garrote ranking techniques. This study concluded that the proprietor has to maintain separate account for business, different telephone and contact connection and separate room too. Then only the proprietors can get success in their business.

### **Introduction**

The term business refers to an organization or enterprising entity engaged in commercial, industrial, or professional activities. Businesses can be for-profit entities or they can be non-profit organizations that operate to fulfill a charitable mission or further a social cause. Businesses range in scale from sole proprietorships to international corporations and can range in size from small to large.

An entity that operates for commercial, industrial, or professional reasons. The entity generally begins with a concept and a name. Extensive market research may be required to determine how feasible it is to turn the idea into a business.

Determining the legal structure of the business is another important factor to consider. Business owners may need to secure permits and licenses and follow registration requirements in order to begin legal operations. Corporations are considered to be juridical persons in many countries, meaning that the business can own property, take on debt, and be sued in court.

### **Business work From Home**

A business whose primary office is in the owner's home. The business can be any size or any type as long as the office itself is located in a home. Most cities and many counties have zoning ordinances that limit, to one degree or another, whether you can operate a business from home. If business visitors must walk through your home to get to your office, it's important to keep personal areas of your home neat and uncluttered by personal items, such as laundry and children's toys. About half of home offices are located in a spare bedroom, which hopefully has a relatively soundproof door.

### **Review of Literature**

**Go, (2016)<sup>1</sup>** In this research paper said that there are stating the focus on major failures and dark side of work from home, the cultural differences faced during webinars by the employees. Work from home creates a big gap in communication between superior and the subordinates.

**Amiable & Kramer, (2013)<sup>2</sup>** In this article explained there are found that work from home is helping the employees to balance and differentiate their office work with their routine work. The study also added that work from home saves time, increases the productivity, Anises the targets on time and also helps the employees to give time for their personal life.

**Gajendhran and Harrison, (2007)<sup>3</sup>** revealed in their study that it is difficult to monitor a worker's effort at home, especially when occasionally being interrupted by private responsibilities and family members. In a competitive labor market, such productivity effects would be respected in a worker's wage level. Evidence on the productivity effects of Work from home is inconclusive, but seems to suggest positive effects more often than negative effects.

**Crosby and Moore (2004)<sup>4</sup>** In this research paper author explained concluded that home working was not panacea for modern working life. Careful consideration should be given to aspirations and personality skills of those who are thinking of working from home. Those who have tendency to work long hours outside the home might and that home life is even further marginalized by work life.

### **Need For the Study**

Even though future is uncertainty, every business has faced different kind of risks like productivity, profitability and huge decrease in dealings etc., during the pandemic period. On that situation work from home and business from home have given a hand to business as a support. This present research to study the impact of business from home during the pandemic period whether its gave chance to develop their business or not.

### **Statement Of the Problem**

In business point of view, future is uncertain. The businessmen have to meet various risks relate to their business. While facing those kinds of problems, they have alternative methods to solve those issues. Among them business from home is a boon to business development during pandemic situation. Anyhow this present study to analyze positive and negative effect the business from home.

### **Objectives Of the Study**

- i. To analyze the factor to get success when doing business from home.
- ii. To know the problems faced while doing business from home.

### **Research Methodology**

“The procedures by which researchers go about their work of describing, explaining and predicting phenomena are called methodology”.

**SAMPLING TECHNIQUE:** When the population elements are selected for inclusion in the sample based on the ease of access, it can be called convenience sampling.

**TYPE OF RESEARCH:** This study is descriptive in nature. The descriptive research is one that describes something the demographic characteristics of the consumers who use the products.

**DATA SOURCES:** The major source, which was used for this study, was primary and the secondary data source.

**PRIMARY DATA:** The primary data collected with the help of structured questionnaires and interview method. The questionnaire was administrated to who doing business from home.

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**SECONDARY DATA:** Secondary data was collected from various books, journals, and websites pertaining to this study.

**TOOLS FOR ANALYSIS:** In this study the collected data were analyzed by using simple percent analysis and Garrett ranking technique

**SAMPLE SIZE:** The sample size is 84 respondents constituting all categories of people from Coimbatore district.

**AREA OF STUDY:** This Study was conducted in Coimbatore District.

**PERIOD OF STUDY:** This study was conducted from Dec 2021 to Feb 2022.

### Limitations Of the Study

- 1) This study considered only those who are doing business from home during pandemic period.
- 2) This study conducted in Coimbatore district alone, not generalized

### Analysis And Discussion

SOURCES	FACTORS	No. of RES	TOTAL	%
GENDER	MALE	53	84	63.10
	FEMALE	31		36.90
AGE OF THE RESPONDENT	19 YEARS TO 25 YEARS	13	84	15.48
	26 YEARS TO 35 YEARS	26		30.95
	36 YEARS TO 45 YEARS	34		40.48
	ABOVE 45 YEARS	11		13.10
EDUCATION QUALIFICATION	SCHOOL LEVEL	08	84	09.52
	UG LEVEL	13		15.48
	PG LEVEL	17		20.24
	PROFESSIONAL	28		33.33
	OTHERS	18		21.43
TYPE OF BUSINESS	FOOD ITEMS	38	84	45.24
	CLOTH ITEMS	07		08.33
	MONEY TRANSFER / RECHARGE	34		40.48
	OTHERS	05		05.95
IS BUSINESS FROM HOME COMFORTABLE	YES	52	84	61.90
	NO	29		34.52
	SOMEWHAT	03		03.58
LEVEL OF SATISFACTION ON BUSINESS FROM HOME	HIGHLY SATISFIED	13	84	15.48
	SATISFIED	28		33.33
	NEUTRAL	18		21.43
	DIS SATISFIED	14		16.68
	HIGHLY DIS SATISFIED	11		13.10
FACTORS FOR SATISFACTION	NO NEED TRANSPORTATION	18	84	21.43
	NO NEED AGENTS	11		13.10
	TIME SAVING	21		25.00

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	UNDER OWN VISION & CONTROL	32		38.10
	OTHERS	02		02.37
ISSUES FACED DURING BUSINESS FROM HOME	ELECTRICITY CHARGE	16	84	19.05
	COMMUNICATION CHARGES	12		14.29
	DOUBLE SPENDING	44		52.38
	OTHERS	12		14.28
RECOMMENDATION TO BUSINESS FROM HOME	HIGHLY RECOMMENDED	32	84	38.10
	RECOMMENDED	44		52.38
	NO IDEA	08		09.52

**SOURCE : PRIMARY DATA**

The above table reveals that **63.10** per cent of the respondents were **male**, **40.48** per cent of the respondents were under **36 YEARS TO 45 YEARS**, **33.33** per cent of the respondent's educational qualification is **Professional**, **45.24** per cent of the respondents doing **food item** business, **61.90** per cent of the respondents were **comfortable with business from home**, **33.33** per cent of the respondents were **satisfied with business from home**, **38.10** per cent of the respondents were satisfied because of business from home is **Under Own Vision and Control**, **52.38** per cent of the respondents were facing problem like **double spending for both home and business expenses** while doing business from home, **52.38** per cent were **recommend to other entrepreneurs** to business from home.

**Garrett Ranking Technique****Factors For Successful In Business From Home**

S.NO	FACTORS	TOTAL SCORES	MEAN SCORES	RANK
1	UNDER OWN CONTROL	4508	53.67	II
2	SEPARATE ROOM FOR BUSINESS	3967	47.23	V
3	ALLOT TIME FOR PERSONAL WORKS	4156	49.48	IV
4	SEPARATE ACCOUNT FOR BUSINESS & FAMILY	5080	60.48	I
5	AMOUNT SPENDING FOR BUSINESS PURPOSES	4496	53.52	III

**SOURCE: PRIMARY DATA**

The above table reveals that the ranks given by the respondents to the factors for successful in Business from Home. “**SEPARATE ACCOUNT FOR BUSINESS & FAMILY**” was ranked **first** with total score of **5080** and mean score of **60.48**. “**UNDER OWN CONTROL**” occupied **second** position with the total scores of **4508** and mean score of **53.67**. “**AMOUNT SPENDING FOR BUSINESS PURPOSES**” occupied **third** position with the total score of **4496** and mean score of **53.52**. “**ALLOT TIME FOR PERSONAL WORKS**” occupied **fourth** position with the total scores of **4156** and mean score of **49.48**. “**SEPARATE ROOM FOR BUSINESS**” occupied **fifth** position with the total score of 3967 and mean score of **47.23**.

It can be concluded that the factor for success in business from home is **Separate Account for Business & Family** was ranked as first.

## Conclusion

During Pandemic period, the proprietors of various businesses have face lot of issues to get success in their business. Business from home is the best solution to face those issues. While doing business from home, the proprietor has to meet business dealing with different angle and also different set up from family. The proprietor has to maintain separate account for business, different telephone and contact connection and separate room too. Then only the proprietors can get success in their business.

## Scope For Further Study

This study will extend to analyze and develop various principles regarding business from home. Through the further study, provide suggestion for new entrepreneurs to start the business without fear of risks. And also, this study will widen the research area and period of the study.

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## Challenges Faced by Rural Population On Digital Payment

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### Abstract

A digital Payment System or Digital payment Processing System is a boon to today's world, thanks to the advancement of Information technology. Digital payments henceforth will be called OPPS made a huge impact by cutting across all the barriers like space, time, language, currencies, etc. OPPS is the heart of any Ecommerce system. Ecommerce Systems made it possible to purchase products or services from any part of the world in a few minutes with various currencies. The present study is intended to analyze the challenges faced by rural population on digital payments.

### Introduction and Problem Statement

Global business is driven by technology and innovations. In many cases, technological innovations change the face of the businesses and the ways through which businesses are carried out. Technological innovations have also changed the prospect of payment systems. In recent years, economic transactions are carried out through electronic or online or cashless means all over the world especially in developed countries and developing countries like India. As a result of increased digital



means of payment has brought down usage of cash transactions in the economy. Digital transactions have the features of speed, less cost, and comfort.

A well-functioning digital payment system has much relevance on overall economic activity, monetary policy, and financial stability of a country. More than 2.5 billion adults worldwide do not have formal bank accounts, making it harder to alleviate inequality and spur economic growth. About 60 per cent of this population lives in developing economies. Governments in these countries should step up efforts to boost the use of digital payments to increase financial inclusion, empower women and spur economic growth, says a new report by the World Bank Development Research Group.

With the mobile phone revolution in full swing and pervasive Internet connection, the world is migrating from cash and credit cards to digital payments, such as mobile money, pre-paid debit cards and electronic bank transfers. “Governments in the G20 (Group of 20 major economies) should target digital payments as a way to help people access basic banking facilities, which it says will encourage saving while reducing theft and corruption,” Citing research in countries including Brazil, India, Kenya, Niger, the Philippines and South Africa, the study says digital payment services can reduce the cost of sending money both domestically and across borders, as well as transfer funds more quickly.

#### **Hypothesis for the study**

**H<sub>01</sub>:** Association between the challenges on digital payments and the demographic profile of rural population does not exist significantly.

#### **Literature Reviews**

**Atanda et.,al.(2012)<sup>5</sup>** discussed in detail the structure, importance, challenges and consequences of the newly adopted cashless policy program in the Nigerian banking sector. The cashless policy is mainly instituted to enhance the effectiveness of flow of financial resources among economic agents in the economy at least cost possible as well as ensuring prompt cash transfers within the system. The Central Bank of Nigeria (CBN) cashless initiative is geared towards eliminating the continuous use of physical cash in most daily transactions at the business unit of the economy, as well as regulating, controlling, and securing the financial system. A critical analysis of the policy as contained in this report as identified major constraints that can hinder the effectiveness of the cashless banking without prompt attention by the concerned authority.”

**Bansi and Urvi (2012)<sup>6</sup>** stated that; as per technology changes suitable changes should be adopted by the economy. In addition, among all the changes in economy lead to some drastic changes in the transaction. Nowadays in any transaction, Plastic money becomes an inevitable part of the transaction. In addition, with it, life becomes easier and development would take better place. Relating to Indian scenario how the plastic money took place in the banking world would be the focus by the researcher over here. In addition, along with the plastic money it becomes possible that control the money laundry and effective utilization of financial system would become possible which would also helpful for tax legislation.

#### **Methodology**



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The research is investigative and qualitative in nature and the methodology adopted for the study is presented below. The research work is mainly based on primary data collected from the sample respondents through a structured questionnaire. Other information relevant for the study's analysis and others was collected from secondary sources such as journals, magazines, published and unpublished research works and websites. A total 100 (20 samples from each zone) from the city are being selected and to whom the questionnaires are distributed. The sampling technique adopted for the study is simple random sampling.

### Statistical tools for analysis

- Simple Percentage
- Analysis of variance

### Limitations of the study

1. This research was location specific and was confined to the city of Coimbatore in the state of Tamil Nadu in India. Hence the results of this research may not be applicable to other parts of globe.
2. The study adopted simple random sampling which was one of the methods of probability sampling and hence the limitations of this technique are applicable.

### Analysis and discussion

**Table 1: Demographic Profile of the Respondents**

Classification	No of Respondents	Percentage	Total
Gender			
Male	56	56	100
Female	44	44	
Age (Years)			
16 - 25	12	12	100
26 – 35	28	28	
36 - 45	38	38	
Above 45	22	22	
Marital Status			
Married	76	76	100
Unmarried	24	24	
Others	0	0	
Educational qualification			
No formal education	15	15	100
HSC	37	37	
UG	28	28	
PG	08	08	
Diploma and others	12	12	
Occupation			
Farmer	26	26	100
Professional	06	06	

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Self employed	24	24	
Public employee	04	04	
Private employee	34	34	
Others	06	06	

**Source:** Primary data

The above table represents the demographic profile of the respondents who are the rural people. Out of 100 samples selected 56 respondents were male, 38 Respondents were between 26-45 years of age, 76 respondents were married, and 37 respondents have Higher Secondary level of educational qualification and finally 34 respondents are private employees.

### Challenges in Digital Payments

**Table 2: Challenges on digital payments**

Challenges	Mean score	Rank
Lack of awareness among most of the rural population	2.62	14
Poor connectivity/Network issues which takes a long time load to next step	1.70	8
Extra charges during some transaction that forces the rural people to opt out of its usage	1.86	10
Literacy problems	1.26	1
Lack of information about the procedure involved in making digital payments	1.45	5
Frequent technological changes to update the advancements	1.78	9
Tedious Procedures at times	1.62	6
Miscommunications from the banks to customers	1.92	11
Unsafe transactions	1.66	7
Need for advanced mobile phones	1.29	2
Maintaining Secrecy/Passwords/PIN	1.39	3
Technical barriers	1.44	4
Lack of proper government regulations	2.06	12
Knowledge gap of various services	2.21	13

**Source:** Primary data

The table above depicts the challenges faced by the rural population on the digital payments. Based on the mean score, the various problems are being ranked. It is clear from the table; the challenge literacy problem has been ranked first, followed by need for advanced mobile phones, maintaining secrecy/password/pin and finally lack of awareness among most of rural population.

### Association between the challenges faced by the rural population on digital payments and their demographic profile

**H<sub>01</sub>:** Association between the challenges on digital payments and the demographic profile of rural population does not exist significantly.

**Table – 3: Chi-Square Analysis**

S. No	Dependent Variable	Independent Variable	$\chi^2$	Sig. value	Hypothesis
1	Challenges	Gender	2.28	0.00**	Rejected
2	Challenges	Age	1.62	0.21	Accepted
3	Challenges	Marital status	3.98	0.02*	Rejected
4	Challenges	Education	8.29	0.02*	Rejected
5	Challenges	Occupation	2.72	0.08	Accepted

**Source:** Primary data \* Significant at 5%. \*\* Significant at 1%

The above table depicts the chi-square analysis between challenges on digital payments and the demographic profile of rural population. It is clear from the table that the hypothesis is accepted for age and occupation and rejected for the rest of demographics. Hence, the null hypothesis is rejected for those variables and conferred that association between the challenges on digital payments and the demographic profile of rural population do exist significantly via; gender, marital status and education.

### Conclusion

India is among the fast promising as one of the largest and well-built economies. For sustained development and growth with robust economic development, certain integral factors like improved transparency, corporate governance etc, play a major role. All developments could be feasible only when the population embraces the digital payments and digital transactions. Hence, if the challenges that are discussed are addressed and improved solutions in terms of digital transactions with more secured features, ease of transactions and reduced cost of managing the digital payments could lead to more potential developments and supporting in improved conditions of digital payments processing.

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## **A Study on Competency Management of Employees Working In Logistics And Supply Chain Management**

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### **Abstract**

There has been a discussion about competency management of employees over a past few years. Competency management of employees being employed in logistics and supply chain management (SCM) helps them to develop the skills, knowledge, and behaviors those are actually needed, so that they themselves can realize the full potential of the workforce. For decades, organizations of all sizes and industries have relied on competency management to inform their strategic decisions and guide their workforce development initiatives. Competency in logistics and supply chain management (SCM) comprise of the potential to examine and outline newly discovered dispersal networks & enhance active networks, along with administration of figures needed for decree processing and demand forecasting. This paper demonstrates the motive and effectiveness of competency management on logistics and supply chain management (SCM). A great supply chain strategy can provide success for not only to the company in question but also its partners and customers

### **Introduction**

Logistics is not just concerned with material or information transitions but it holds up export functions, marketing functions and assist in accompanying up to the minute and advanced ideas to improve and upgrade the exportation.

Logistical competency leads to increased revenue, increased exports, increased economic growth, improvement in business performance, create Employment opportunities and major cost savings in operations and clarify the multiplicity of distribution network. Logistics competency incorporates the potential to analyze and design new distribution networks and go through the roof of existing networks .

The managerial competence element is at the heart of SCM, and the future of supply chains is hinged on these competencies. The individual level in the literature reviewed on managerial competence includes aspects of business analysis, business management, people management and company and industry experience on exportation.

### **Review Of Literature**

Kim Mink Yun, Suresh Nallan C, and Kocabasoglu-Hillmer Canan 1 Sep 2013: The main objective of this research is to investigate the impact of competency skills and dimensions on logistics and supply chain management. Based on the theoretical background of dynamic capability, this study also examines the role of the business environment on the relationship between manufacturing flexibility and supply chain responsiveness.

Vandana Saini (2015): A study on skill Development in India: “Need, Challenges and ways forward “-The main intention of this research is to review the present-day skills and competencies of employees

in the sector of logistics and supply chain management (SCM), review the upcoming defiance's faced by skill development system in India and advice best possible solutions or ways forward for the employees. The research came to an end by stating that "India's transition to one of the largest and fast-growing global economies during the last decade has been a remarkable phenomenon. By establishment of skill development workshops in every state will satisfy the need of training curriculum design, assessment and certification as per the global standard. Private participation will be more appropriate in infrastructure development and training to the participants.

Dr. Jagdish Prasad & Dr. D.G.M. Purohit (2017) : A study entitled "Skill Development, Employability and Entrepreneurship through Make in India: The intention of this study is to appreciate the effect of Make in India initiative on employability, the current status of skill development in India in the area of exports and to analyze if the Skill Development measures will help to bridge the gap of existing skills and required skills of personnel in India and to understand the Challenges in Skill Development Initiatives in India. The standard and quality of training need to be upgraded. Soft skills training along with technical skills will bring desired results.

Dr. S. C. Patil & Prof. Amaresh B Charantimath (2021): A study on "Employability through Skill Development Programmed. The motive of the study is to comprehend the need of employability skills and to study the skill gap - desired vs possessed. The study concluded that the skill gaps can be bridged with training, education and short-term courses. In spite of the efforts there is still a great scope in transformation of abandoned knowledge into skills. Various ambitious missions of Government of India i.e. Make in India, Atmanirbhar Bharat, 5 trillion economy dreams etc can come true with collective efforts.

### Objective of the Study

- This particular research has been carried out to understand about competency required in supply chain management system.
- The study aims at developing competency skills required for employees under logistics and supply chain management.

### Competency Management

**Competency management** is an application of spotting out the key skills necessary for an employee to outreach the target performance in their specified role, and then developing and optimizing those skills to best line up with the business strategy of an organization. When looking at the meaning of competency management, it is first helpful to look at competencies themselves.

Competencies are also known as skills, values or behaviors, and speak for the '**how this should be accomplished**' rather than the '**what is the objective**' of a goal. Competency management in logistics includes the ability to scrutinize and sketch new distribution networks and enhance existing networks. Supply Chain Management (SCM) is one of the crucial factors to success in this contemporary global environment for any business organization. Supply chain strategy defines the employees how the supply chain should operate in order to compete. Logistics management is that part of supply chain management that plans, implements, and controls the efficient, effective forward and reverses flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements.

### Motive of the Study



It certifies that firm should come up with fast, accurate and quality service. Logistical competency leads to increased revenue, rise in economic growth, create employment opportunities, create opportunity for major cost savings in operations and simplify complexity of distribution network. Developing competency of employees results in fostering a strong corporate culture, build a more aligned workforce and establish key competitive differentiators. Competence development boosts the match between the strategic goals of an organization and the competencies of its employees.

Enhancing competency skills of the employees result in helping them to focus on their behavior on things that matter most to an organization and help drive success. They can provide a common way to harmonize, select and develop talent and also results in increase in business performance and in economic growth.

### **Effects of Competency on Logistics And Supply Chain Management (SCM)**

Competence has an agreeable influence on employee performance. An employee's competence has a favorable and substantial influence on employee performance at work especially in the sector of logistics and supply chain management (SCM). Success in logistics interprets increased efficiencies, lower costs, higher production rates, better inventory control, smarter use of warehouse space, increased customer and supplier satisfaction, and an improved customer experience. Logistics industry provides significant macro contributions to national economy by creating employment, and creating national income and foreign investment influx. On the micro scale, logistics industry is a key industry in increasing the competitive power of corporations.

Supply chain management is foremost because it can help achieve several business objectives. For instance, controlling manufacturing processes can improve product quality, reducing the risk of recalls and lawsuits while helping to build a strong consumer brand.

### **Suggestions**

- It is suggested that the existing registered organizations which are established for exports, need to be followed advises of the associations or trade unions.
- The exporters are suggested to make use of the available information's and infrastructure for the success of supply chain management system.
- There is a need to maintain a smooth and cordial relational ship with the so-called agent or merchant and also with government departments.
- It is also advised to follow the latest technology as GPS (Global Positioning System) for continuous and successful logistics supervising system.

### **Conclusion**

As supply chain management (SCM) and logistics have moved from a cost focus to a customer focus and now currently to a strategic focus, the need to think strategically about the supply chain and logistics has never been more important. The success of a strategy is only as good as the company's ability to fully and properly execute it. A great supply chain strategy, linked with operational excellence, can provide success for not only to the company in question but also its partners and customers. A good supply chain management system will generate income not only to the business and also for the country. If the supply chain system functioning well the business will progress for bright future.

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## **New Business Models on Research Results and Exemplary Case Study**

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### **Abstract**

A term ‘business model’ appeared in the scientific article in 1957 for the first time but a broader discussion about business models started in the last decade of the previous century. A parallel debate about the meaning of sustainability for the transformation processes in society and their economies has started since the beginning of nineties. At present, different ideas and concepts about new business models emerge from this debate and practices observed on a market. So far, this movement is young and therefore there are not many scientific studies on the subject. This paper contributes to this gap in knowledge. The aim of this paper is to present the results of own studies carried out in international cooperation. Qualitative research on new business models was conducted in 12 selected European countries (Austria, Belgium, Croatia, France, Germany, Ireland, Lithuania, The Netherlands, Poland, Portugal, Switzerland and Turkey). In Poland, a dozen companies were classified as developing new business models based on the criteria identified in the preliminary study done in the Netherlands. The concept of creating shared value and contributing to sustainable development are the central categories for the idea of new business models. The paper presents a description of the research and methodology as well as an exemplary case study with critics and conclusions.

### **Introduction**

An exemplary dictionary definition of the word ‘model’ presents its meaning as: “a standard or example for imitation or comparison” and/or “a representation, generally in miniature, to show the construction or appearance of something”<sup>2</sup>. In other words, this is something that can show, simulate or explain real things and/or processes in simplified way. It usually reduces the complexity of the real world to few variables only to better understand what is happening in reality<sup>3</sup>.

Jabłoński, like many other authors, claims the term ‘business model’ first time appeared in the R.Bellman and C.Clark article from 1957<sup>4</sup>. After almost sixty years it is still difficult to recognize generally accepted definition of the term ‘business model’<sup>5</sup>.

### **New Business Models**

The term ‘new business model’ used in this paper refers mainly to business models that contribute to sustainable development of the society. Sustainable development started its political carrier from the Brundtland report<sup>17</sup> and was acknowledge as appropriate leading concept to coordinate economies around the world thanks to the so-called Earth Summits organized by United Nation (first in 1992 in Rio de Janeiro). Current debate in this area suggests, as in ISO26000 guidelines<sup>18</sup> that all action undertaken under the social responsibility agenda somehow contribute to sustainability of the whole society. To make it happen the organization should organize its social responsibility management system according to suggestions included in this standard. The question is whether it is enough to say that this creates a new model of business or rather that it just adds new element to the traditional business model? Looking much broader one can argue that nowadays we perceived businesses as entities that, in order to survive, need to establish and realize a set of goals (economic, social and environmental) rather than only one type of goals (economic one) typical for the past understanding of the business organisation<sup>19</sup>.

In this light every business (in fact: every organization) stands on three legs: economic, social and environmental. But this picture should reflect also that these three dimensions of sustainability can have their micro and macro meaning. Every organization should contribute to creating values for the whole society with the focus on particular stakeholders but at the same time should stand for its own sustainability. That makes the whole picture even more complicated<sup>20</sup>.

**Current concepts that contribute to a current debate about new business models include** sustainability as a central category for operational activities and different new approaches to value creation process (multiple values creation, shared value creation, collective value creation)<sup>21</sup>. Multiple, shared and collective value creation are the three interlaced concepts and one can argue that they more acknowledge their creators rather than give quite different perspective of discussed issues. However, the underlying logic behind these concepts differs even if they lead to the same or similar conclusions. Multiple value creation is based on a triple-bottom-line concept and interferes with sustainability claiming that the organization creates more than one type of value: environmental, social and economic<sup>22</sup>. Creating shared value is based on a concept that initial creator of value is not the only one that benefits from this process of value creation<sup>23</sup>. On the other hand the concept of collective value creation emphasizes the collaboration of different parties in value creation process. In this light “sustainability can be interpreted as a general (overarching) value, one in which these common values are embedded”<sup>24</sup>.

The concept of sustainability offers a step towards the new paradigm of thinking about business models and the whole economy. There is a promise of something new behind terms that are repeated all around: green economy, blue economy, innovative value proposition, sharing economy, circular economy and more inclusive form of capitalism (just mentioning only those). Signs of these changes can be observed around and could be perceived as first steps in a transition to the new reality. Materials are closed in loops; garbage becomes a commodity and waste streams instead of being dumped generate profits. Social and/or ecological problems are addressed with the participation of business organizations. Many services, e.g. health care or education, are carried out with the help of multilateral exchange/barter systems or platforms, or using alternative currencies. Better social capital reduces the need for other types of capital (e.g. human and financial capitals). These are just examples of common actions and collective value creation, which can be found in reality. Examples of such innovative

projects are becoming more numerous. However, these initiatives are still young and demanding research. We do not know their actual significance for the future of societies and their economic processes. Empirical research, however, can bring us to better understanding of their nature and the way they implement sustainability and achieve multiple value creation.

The research presented below intend to stimulate and contribute to the debate about new business models taking into account the European perspective and gain better initial understanding about their nature<sup>25</sup>.

### **Qualitative Research on New Business Models**

#### **Description of research and methodology**

A qualitative research project on new business models in Europe started in 2013 and was initiated in 2011 by Jan Jonker, professor of corporate sustainability at the Nijmegen School of Management (NSM), Radboud University Nijmegen (Holland). The main aim of the whole project was to explore emerging new business models to discover their nature, structures and processes, typical elements and practices.

The initial research in the Netherlands gave the insight in some basic patterns and characteristics of new business models (developed further below). The presented research intended to verify these outcomes and give the European dimension to the study that initially was limited only to one country. The research was based on conducting a series of interviews in each of the co-operating countries by scientists involved in the project. The partnership covered institutions from the following 12 countries: Austria, Belgium, Croatia, France, Germany, Ireland, Lithuania, The Netherlands, Poland, Portugal, Switzerland and Turkey<sup>26</sup>. Since 2013 results of the European research have been analyzed and discussed during scientific conferences and seminars and are a subject of different – mainly country-based – papers.

The research is of a qualitative type and is based upon Grounded Theory. The semi-structured interviews were used to gather qualitative data. As Konicki noted qualitative approach and therefore qualitative methods seem "very well suited to the study of processes": "With qualitative methods [...] you can capture causal and intervening conditions of specified process of change, for example, in organizations and direction of a development of the process"<sup>27</sup>. The choice of method was determined by the objective of the study. The aim was to understand the processes of creation and development of new business models. The case study was chosen as a method and actually research strategy. This admittedly limit the scope for generalization of results - which does not mean that it is impossible to relate them to the theory and formulate on that basis theoretical conclusions<sup>28</sup>. It is particularly suitable for the formulation of so-called middle-range theory because the main aim of the Grounded Theory is to generate or discover such a theory.

An analysis of qualitative data gathered in the research is based on coding used in Grounded Theory. Coding can help to structure and discover meanings behind the data (sentences and group of sentences expressed during semi-structured interviews and drawings of respondents' business models). Unfortunately, international comparability is limited in this case.

The scenario of the interview consists of four elements: introduction, part 1 (nine open questions on characteristics of new business models together with respondent's drawing

#### **Initial results**

The initial research performed by Jonker identified seven characteristics of new business model presented below<sup>30</sup>. Then the final research covered the intensity with which these characteristics occur in respondents' models. The below checklist was used to obtain relevant findings and the respondents were asked to use seven-point scale to indicate the strength of every characteristic:

The model works on shared value creation,  
 Cooperative collaboration is a central principle,  
 Money is not the only transaction medium,  
 The model is focused on fulfilling needs,  
 The model is based on access and use (not property),  
 The model is founded on a long-term commitment (trust),  
 The model allows alternative currencies.

During the initial research the following three main patterns of new business model were discovered<sup>31</sup>: swapping/sharing (sharing social capital, time, ideas, equipment, property, data and transport, knowledge and networks, organizing collective financing or collective purchases), trading/exchanging (transactions with alternative currencies or based on multilateral barter or even realizing transactions without means of payment), creating (of multiple values for many stakeholders).

There were also more categories mentioned by respondents in some cases such as "so-called 'freemium' models, collective purchase models, matching models, models based on copying nature (Biomimicry), circle and life cycle thinking, boosters, thinking in shifts, and collaborators"<sup>32</sup>.

### Final research

In March and April 2013, the potential respondents were identified on the basis of a snowball effect by asking entrepreneurs about other examples. The first interviews started in May 2013. Then the gathered data (texts of interviews and drawings) were processed. In Poland 12 interviews (out of larger amount of identified cases) were analyzed but the whole international consortium managed to study together 231 cases from Europe. The Polish cases are presented in the table 1.

Table 1. Cases prepared in Poland

B2B	ISSA, Spota Diana, Competitor, Keratin, KŁOS
B2NGO, B2PublicAdm	Stowarzyszenie Obywatele Obywatelom/Kooperatywa, ISSA, KŁOS
B2C	ISSA, Slogan, Spółka Działa, Stowarzyszenie Obywatele Obywatelom/Kooperatywa, Notjustshop, Kreatywni, W te pędy, Gniazdko, Pracownia Panato, KŁOS
C2C	Kooperatywa spożywcza
C2B	Not just shop

Source: own elaboration.

### Exemplary Case Study: Stowarzyszenie Obywatele Obywatelom / Kooperatywa

The Vice-CEO of the Stowarzyszenie Obywatele Obywatelom association was the interviewee in this case. He was the CEO of Kooperatywa at the same time (Kooperatywa is a brand that belongs to the association). The interview was held on 02 June 2013 and all information below



comes from the interview and were up-to-date in a moment of the interview.

Stowarzyszenie Obywatele Obywatelom (Citizens for Citizens Association) has three pillars of its activity:

Typical charity activities of an association (social activism), Publishing of the magazine “Nowy obywatel”, and Economic activity (performed by Kooperatywa).

The associations in Poland can lead economic activity and can offer paid services for public benefit but 100% of the profit should be used for statutory aims of an organization. The main income of the organization comes from this second activity. The economic activity consists of: printing services, typesetting, graphic design, Internet (websites, electronic publications, etc.) and the main market are NGOs and public administration. Initially it was assumed that they would be doing mostly graphic design, but customers wanted otherwise. They currently work on the preparation of publications (provide support throughout the whole process of publishing). Economic activity of association can be only its additional type of activity (according to legal regulations). It means that economic activity is carried out in the scope and scale necessary to achieve the social goals of the organization.

In their business model, social and environmental issues are tightly integrated with each other - it's hard to separate them. This form of organization (three pillars) was a conscious choice - especially that the organization dedicates its activities to non- governmental organizations (this market is not appreciated by the traditional businesses e.g. graphic studios).

Their business has social dimension and it also applies to their economic activity. Organization does not only serve products to its customers but also help them by learning/consulting (what is the added value). In addition, they are a social organization and some customers can work as volunteers in their association. They have a democratic management process which means shared responsibility. All employees of the association are its members. The whole profit that is generated by economic activity is spent on the statutory purposes of the association (it assures the independence what is very important when one take into consideration that the magazine is about serious social and political issues). Three essential elements are: profit, democracy and market.

The way the organization is managed is also important. “We work on tasks and we have this way flexible working hours – it makes possible to adjust to the problems of workers (when due to personal reasons staff can do the job at a different time than expected)”<sup>33</sup>. Environmental dimensions of the business is to follow segregation of wastes in the office. They have introduced even waste segregation in the nearest neighborhood – the segregation was not carried so far in the courtyard house. The office uses Fairtrade tea and coffee. They recommend customers treeless technologies and recycled paper, environment-friendly printing technologies, etc. But according to the respondent they specialize in social issues.

As mentioned before the association runs economic activity but the respondent prefers the term: ‘social enterprise’ rather than ‘firm’ or ‘company’. The strategic goal for the organization is to spread ideas. The type of their business model could be also called – using respondent’s words – social company or multisided platform<sup>34</sup> – it means the multi- level model (the same resources are engaged to produce different values for different groups).

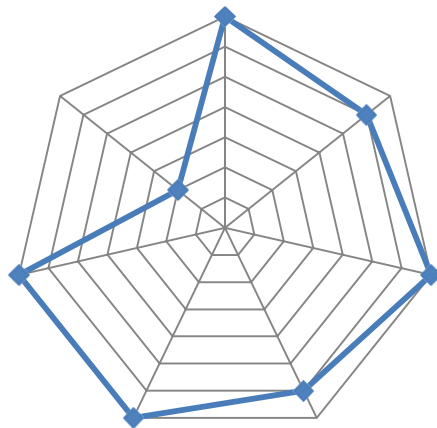
This way the organization represents the create model which is in the eyes of respondent an equivalent of multisided platform – “we sell services and we use money that comes from selling to produce the ideological/social magazine which brings values for people who do not pay for it or bear only a low

cost. The customers buy services from the organization (supporting it this way) to be sure that they will continue receiving the social/ideological values.”

"We treat money as a tool to alter/construct the world rather than treating the world as an opportunity to make money." The organization as a whole creates the following values: social justice, egalitarianism, democracy (all people are equal in the organization), responsibility, commitment, culture of sharing (even when they offer their services, they add consulting/advice, they are committed to the open-source movement, ...), environmental issues (protection of the wildlife, supporting other organizations working for the protection of nature, ...).

The intensity of seven characteristics mentioned above are presented on the graph 1.

In this case only alternative currencies were not a part of described model.



Graph 1. The intensity of new business model characteristics - the case of Stowarzyszenie Obywatele Obywatelom/Kooperatywa.

Source: own elaboration. Legend of the scale: 1 = strongly not the case / 7 = strongly the case)

Comments to the terminology used by the respondent

While describing its organization the interlocutor surprisingly referred to the definition of a multisided platform presented in the work of Osterwalder and Pigneur. They wrote: "Some organizations serve two or even more separate segments of the market"<sup>35</sup>. "Multisided platforms link two separate but interrelated group of customers. [...] Such platforms are of value for one group of customers only under the condition that it is possible to make contact with the second group" and creates "conditions for interaction of representatives of different groups" and are used to generate value building on economy of network e.g., credit card holders and shops<sup>36</sup>.

Though the respondent claimed that the organization works as a multisided platform („the same resources are used to create values to different groups of stakeholders”) it seems that these groups of stakeholders are not linked by this platform and the organization does not build on the network effect (on the economy of network).

### Conclusions

Nowadays we can observe a great movement inspired by the concept of sustainability. The public and individual sensitiveness leads, also in business activity, to new ideas and actions. New business models can be identified and described. Still, we cannot say what is the importance of particular trends and phenomena. Thanks to the presented research we can make an initial categorization of new business



models. These new categories (sharing, exchanging and creating) can be illustrated by numerous of cases around the globe. Still among the major outcomes and problems discovered during the research we can mention:

difficulties with finding examples among mainstream companies (many of cases are of ‘alternative’ type: rebel youth, NGOs activists, ...);

there are many new social cooperatives and social enterprises – but the pattern is almost the same: economic activity is a mean to solve particular social problem (e.g. to help disabled people on a labor market);

relatively low number of cases of C2B and C2C type identified and described at this stage.

There are also some critical conclusions related to methodology used. The tools were prepared in some points on a relatively high level of abstraction (eg. categories and characteristics derived from the initial research). That is why sometimes respondents have difficulties with terminology used in the research – many of them specially from social cooperatives are not highly educated persons in terms of economic and managerial education. Another critical remark is that at least in Polish case respondents when classifying the business model (seven characteristics) gave usually high marks: they assessed this way the possibility rather than current situation of their companies.

Most respondents declare their businesses follow the create model. The terms like community, collaboration, trust, connection and mutual were on the mouths of almost all interviewees and ‘creation of value’ always meant for them something more than just economic value. Ownership could be replaced by access to goods or services. Sometimes even traditional money are no longer necessary thanks to multilateral barter platforms/systems or alternative currencies. Sustainability is becoming a central element of these new business models. This is certainly the beginning of a transition to a new future and there is a strong necessity to research this area and learn more about current trends in new forms of business activities.

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## Supply Chain Management - Pre-requisite for Successful Integration

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### Abstract

Supply Chain Management (SCM) is the process of organizing, implementing, and overseeing the activities of the supply chain with the aim of effectively meeting consumer demands. A shift from managing discrete tasks to integrating activities into crucial supply chain operations is necessary for successful SCM. Here's an illustration: As demands change, the purchasing department places orders. Marketing engages in communication with a number of distributors and retailers in an effort to meet client demand.

### Introduction

A supply chain is a network of facilities and distribution options that performs the functions of procurement of materials transformation of these materials into intermediate and finished products and the distribution of these finished products to customers.

### Integration Process Through Information Technology

The use of information technology by channel partners to exchange goods, communicate information, and integrate their processes has changed the dynamics between organizations and led to more effective channels. Electronic integration of data and the automation of business practices has driven costs down and built sales by better satisfying consumer needs. Technology's function was to connect the supply chain by communicating important business documents using the industry standard Electronic Data Interchange (EDI). Just a few examples of the electronic communication of EDI include purchase orders, invoicing, advanced shipment notification, and monetary payment.

### E-Supply Chain Management

E-business offers a great potential of enhanced supply chain efficiencies. E- business helps the organizations to perform the following transaction with the help of net. E-commerce has a lot of potential for improved supply chain efficiencies. The following transactions can be carried out by businesses thanks to e-commerce and the internet. Supply chain information sharing; price and other deal-making with customers and suppliers; ability for customers to place orders from anywhere; ability for customers to track their orders; ability for customers to make payments; ability for customers' orders to be filled properly and delivered on time; Today, companies are using the internet to conduct a wide variety of supply chain transactions. For example, Amzon.com helps people to select books of their choice. Dell displays all its product information over the internet. Companies like eBay allow people to auction products over the internet. Most companies involved in e-business allow customers to pay over the internet using their credit cards.

An E-business allows a supply chain to gain profit through effective utilization of the following cost reduction opportunities.

- (i) Allows manufacturers to reduce handling costs because of fewer supply chain stages.
- (ii) Allows firms to manufacture customized products.
- (iii) The Internet will save the cost and time for delivery.
- (iv) Reduce facility costs by centralizing all inventories and decreasing the number of facilities required.

- (v) Maintaining a reasonable buffer of unfilled orders reduces the peak load for order fulfillment and thus reduces resources requirement and cost.
- (vi) The ability to reduce safety inventory without hurting product availability can significantly increase supply chain profitability.

### **Use of Internet in SCM**

Internet technology has reduced the cost and complexity of exchanging information and paradigm shift in the way we think about doing business. It helped information exchange open to all retailers, wholesalers and suppliers regardless of size. It enhanced end-to-end supply chain visibility, lower supply chain costs and inventory levels, access to new markets, global and local sourcing, reduced transaction costs.

### **Enterprise Resource Planning (ERP) in SCM**

Enterprise Resource Planning (ERP) systems and supply chain systems has helped large companies to reduce inventories, shorten cycle time, lower costs and improve over all SCM. ERP-SCM systems are designed to streamline production schedule, slash inventories find bottle necks, respond quickly to orders and provide final market information. Radio Frequency Identification (RFID) is an analog-to-digital conversion technology that uses radio frequency waves to transfer data between a moveable item and a reader to identify, track or locate that item. It is a technology, which uses an electronic transmitter to tag the items, and products, which have some unique identification and customer information. It helps in knowing exactly the position of goods at any point of time and can also develop process capture and act on their information. The data generated by RFID is huge and valuable. This information which is a real time enabler helps the executives at all levels of organization to make business decision.

### **Relationship between the Links**

Supply Chain is a network of different types of links. Strength of the Chain lies in the relationship between the links. Companies are now realizing the relevance and role of these links in success of the businesses. In other words, suppliers are partners of the business, and organizations need not to be convinced that in today's scale driven, technology intensive global economy, partnerships are the supply chain's lifeblood. Organizations business success is increasingly relying on their suppliers. Suppliers play an important role in deciding the cost of production; therefore, firms are seeking avenues to reduce cost, improve quality, and develop new processes and products faster than their rivals' vendor can.

### **Partnering Channel Relationships**

Building strong supplier partnerships requires a lot of hard work and commitment by both buyers and sellers. Several key ingredients for developing successful partnerships are as follows:

1. Building trust –find compromise solutions to problems, work toward achieving long-term benefits for both parties and in short go the extra mile.
2. Shared vision and objectives – the partners focus must move beyond tactical issues and toward a more strategic path to corporate success.
3. Personal relationships – Whoever is interfacing with the other company, they are the company.
4. Mutual benefits and needs – mutual needs create not only an environment conducive for collaboration but opportunities for increased innovation.

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5. Both formal and informal lines of communication should be set up to facilitate free flows of information.
6. Organizations prefer working with suppliers who have the technology and technical expertise to assist in the development of new products or services that would lead to a competitive advantage in the market place
7. Both buyers and suppliers must be willing to continuously improve their capabilities in meeting consumer requirements of cost, quality, delivery and technology.

### **Collaborative Planning and Scheduling**

The gradual refinement of collaborative approach is a five-level process which takes place as follows:

**Level 1** focused on internal improvement

**Level 2** starts to break down internal walls and works on corporate integration

**Level 3** businesses start to take an external view with the selected business partners

**Level 4** brings trading partners and suppliers into discussions about how to reach customers

**Level 5** is a move toward truly automated connection between businesses.

The scheduling part is the more sensitive area where most care and importance should be given. The scheduling is more or less like an education program that helps SCM people know about the importance that lies behind collaboration. Development of communication structures that promote collaborative decision making, clear communication of partners' goals and objectives, rigorous performance measurement, intercultural management training, change-management skills training, conflict resolution training, collaborative cultural integration workshops, cross-team training, leadership training, feedback provided on performance and behavior's, relationship development, continuous learning in new supply chain concepts, simulation based training, technology skills training, collaborative process mapping workshops, documented process between partners and collaboration on alternate supply chain solutions. These are some of the training areas if scheduled properly may lead to good supply chain management.

### **Supply Chain Leadership**

Let us start the topic with some examples of how giants concentrate on their supply chain

**Coco Cola** recently started a retail school that will run on wheels to focus on training owners of small retail shops regarding stocking and movement of their soft drink products.

**Dell Computers** in 1994, was struggling second-tier PC maker. Then Dell began to implement a new business model. It converted its operations to build-to-order process, eliminated its inventories through a just-in-time system and sold its products directly to consumers. Dell developed a supply chain mastery that went far beyond the simple pursuit of efficiency and asses productivity.

**Baxter** hospital-supply company, in the mid-1980s, mastered its supply chain by developing a powerful new type of partnership with its hospital customers. The company developed a new strategy for managing its customers' inventories within their hospital facilities.

**Procter and gamble** the company first partnered with Wal-Mart, through this system, P&G replenishes Wal-Mart's facilities without purchase orders based on the retailer's product movement data.

### **Moving towards Supply Chain Mastery**

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1. Develop a fact base - the first step toward supply chain mastery is to develop a sound fact based involving both inter-company supply chain economics and market segment characteristics.
2. Engage your counterparts – in a successful project, the key functional counterparts from areas such as marketing, sales and finance need to be engaged from the outset.
3. Top Management's involvement - in addition to involving counterpart's functional department heads in the supply chain strategy design process, top management needs to be engaged from the outset. Senior executives have important relevant experience that can be tapped.
4. Drive change in the other functions – the key to successful implementation of the new business model is to utilize a team approach. The key functional counterparts must share common performance objectives that span their functional areas and be organized in a way that forces them to focus systematically and often on their joint progress.
5. Create a roll out game – the key to rolling out a major supply chain innovations is to develop a systematic game plan. A systematic rollout game plan involves four key steps. Identify opportunities, organize the initiative, map the market and systematically realign the business model.

The supply chain masters who seize first mover advantage will create strong market share gains and lasting strategic benefits that competition simply cannot match.

### **Vendor Managed Inventory**

A means of optimizing Supply Chain performance in which the manufacturer is responsible for maintaining the distributors inventory levels. The manufacturer has access to the distributors inventory data and is responsible for generating purchase orders. The manufacturer receives electronic data (usually EDI or via the internet) that tells him the distributors sales and stock levels. The manufacturer can view every item that the distributor carries as well as true point of sale data. The manufacturer is responsible for creating and maintaining the inventory plan. Under VMI, the manufacturer generates the order, not the distributor. The benefits of VMI are numerous for both Manufacturer and Distributor. The benefits are as follows:

#### **Dual Benefits**

- Data entry errors are reduced due to computer-to-computer communications. Speed of the processing is also improved.
- Both parties are interested in giving better service to the end customer. Having the correct item in stock when the end customer needs it, benefits all parties involved.
- A true partnership is formed between the Manufacturer and the Distributor. They work closer together and strengthen their ties.
- Stabilize the timing of Purchase Orders - POs are now generated on a predefined basis.

#### **Distributors Benefits**

- The goal is to have an improvement in Fill Rates from the manufacturer and to the end customer. Also, a decrease in stock outs and a decrease in inventory levels.
- Planning and ordering cost will decrease due to the responsibility being shifted to the manufacturer.
- The overall service level is improved by having the right product at the right time.
- The manufacturer is more focused than ever in providing great service.



### Manufacturers Benefits

- Visibility to the Distributors Point of Sale data makes forecasting easier.
- Promotions can be more easily incorporated into the inventory plan.
- A reduction in Distributor ordering errors (which in the past would probably lead to a return)
- Visibility to Stock Levels helps to identify priorities (replenishing for stock or a stock out).  
Before VMI, a manufacturer has no visibility to the quantity and the products that are ordered.  
With VMI, the manufacturer can see the potential need for an item before the item is ordered.

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### Supply Market Intelligence

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### Abstract

Simply described, market intelligence (MA) is one of the most important inputs for the sourcing process, along with supply market intelligence (SMI), procurement intelligence, and use sourcing intelligence. In order to lower risk and increase savings, best-in-class organizations have integrated supply market knowledge into every step of their sourcing process. Continue reading to see how a solid and successful SMI strategy may give a procurement organization a competitive edge.

### Introduction

Facing expanded uncertainty in economic markets, groups are increasingly aware of the want to carefully monitor market situations and reply appropriately through advanced delivery chain strategies. As greater groups seek to construct sourcing techniques that capture cost financial savings opportunities, they're! ending major shortfalls with inside the marketplace intelligence and remodelling capabilities that shape the premise for powerful strategies and negotiation. Further, they're coming across that the needed integration of marketplace intelligence into operational decisions, such as budgets, port objectives, market pricing, era insights, and international growth is generally not properly executed. The end result is misalignment among calls for and supply planning, and important gaps in operational performance and threat mitigation. To cope with this situation, organizations need



to expand deep marketplace intelligence that will provide insights into center factors of marketplace developments, commodity pricing, international capacity, and authorities and regulatory changes that might have an effect on international sourcing. They additionally want perception into financial developments that will affect their organizations deliver chain. Unfortunately, those abilities appear to be missing in maximum groups, primarily based totally on the outcomes of a look at we these days conducted among deliver control executives. Our research primarily based totally on interviews with concern rely on professionals in a number of industries who've deployed or are in the process of deploying Centers of Excellence for supply market intelligence (SMI). In addition, we surveyed 89global deliver chain executives via the International Association of Commercial and Contract Management (ACCM). (See sidebar for a greater at the look at sample.) This article explores the idea to deliver market intelligence. We describe how corporations are structuring their delivery control groups to optimally collect marketplace data, discover nice practices for synthesizing and deploying this information, establishing metrics for measuring the consequences of SMI. Further, we discuss how a few leaders are actually0 starting to extend the utility of SMI to different strategic commercial enterprise decisions that lie outdoor the world of contracting and category analysis—a hobby this is undoubtedly affecting decisions in annual budgeting, consumer markets, technology integration, and! financial budgeting. We believe that the revolutionary utility of SMI to those areas, eleven though nevertheless in a nascent stage, will allow many organizations to obtain advanced marketplace overall performance and outcomes.

### **Supply Market Intelligence**

One of the foundational themes underlying this research is that a good SMI organization will a lot more than merely collect and analyses data. successful organizations shine at partaking stakeholder's index! Ning information necessities yet as disseminating information to confirm that it's effectively applied in key compact business sectors across the organization. Supply market intelligence will be de! need as a process for making a competitive advantage and reducing risk through raised knowledge of the offer market

Supply market place evaluation affords a strategic expertise of:

- how a marketplace works
- the path wherein a marketplace is heading
- the competitiveness of a marketplace
- the functionality and ability of a marketplace
- key providers and the cost that providers' region at the corporation as a customer
- how providers or markets may be advanced to higher meet corporation requirements• the sustainability overall performance and functionality of the marketplace
- the way to control variances in pricing over the years or among providers.

Supply marketplace evaluation additionally facilitates to control chance through figuring out and analyzing how beneficial the delivery marketplace is to consumers in comparison with providers, and the opportunity of deliver marketplace failure. Together with strategies which includes marketplace sounding and growing providers and markets, such evaluation can help organizations to expand techniques to persuade the marketplace, to: • growth the delivery base and competition (in which possible) • offer modern responses to constraints or opportunities. The ability advantages of deliver marketplace evaluation growth dramatically because the diploma of commercial enterprise chance

and/or expenditure for the products or offerings growth, and as the dimensions of the marketplace relative to the dimensions of presidency commercial enterprise increases. Resources invested in deliver marketplace evaluation for procurement are constantly greater than offset through the advantages received in progressed cost for cash and decreased chance for the corporation.

### **Defining the Need for Market Intelligence**

Organizations collect differing types data} associate degreed information. thus, what's special concerning offer Market Intelligence? To answer this question, we tend to should first outline specifically what quite information folks ought to build higher sourcing decisions. Our analysis disclosed that what they most frequently need is information about market conditions for product and services for a selected sourcing requirement. Of course, there are variety of potential outcomes from an SMI analysis. They generally specialize in analyzing stuff value drivers and observance suppliers to avoid major supply disruptions. the primary might focus on distinctive internal cost factors (leverage, order volume, proximity, contract management) and external factors (like general demand, stuff costs, R&D investments). Another outcome may be a Pressure Action Capability Enablers (PACE) framework that assesses pressure points within the business, actions taken by industry actors, needed skills to support the actions taken, and business enablers to mitigate pressure points. Regional analyses of market share, rate of growth and projected sales would additionally constitute this class of results. provider observance results would come with quantitative money analysis: scheming financial ratios from financial gain statements and balance sheets and examination them to industry averages for public companies, and reviewing every supplier's creditworthiness. Qualitative associate degree analysis akin to capability utilization, economic impact, job losses and impact of currency fluctuations. A SWOT analysis supported these internal and external risk factors are alternative necessary results of the SMI. To an oversized extent, the necessity for market intelligence and development of those product should be formally pictured before the tasks are literally carried out. Our survey results indicate that in most cases the most shoppers of this product are the class managers who are trying to enter a replacement sourcing event for a selected one class (maintenance, copper, steel, etc.) as a part of an overall category strategy. In alternative cases, inquiries relate to internal business wants that need associate degree analysis of paying information, production levels, client spending trends, market prices, competitive measures, and other numerous types of data collection. As money risk has raised within the provider base, there's a growing demand for risk info and follow-up assessments of specific risks. SMI requests are available in a range of formats. Some occur as a part of an annual budget process. Others are periodic and need previous notification; For example, a class team contacts an SMI cluster with a call for participation for a sourcing event which will come about someday in the future. Others are unpunctual unintentional requests for "quick access information" which will give a fast update on a selected issue or risk ("Is this merchandiser going out of business soon? ") MCH organizations ought to be ready for every type of requests and set a practical method and expectations for his or her ability to reply to those requests.?? military operation process. This becomes even additional necessary thanks to the investments needed to finish a full market intelligence report. Our analysis shows that typical delivery time is required. the sensible firms that we are able to study navies (high level insights) in ten days or in-depth analysis (detailed insights resulting in strategic recommendations) in forty-five days. These firms bank heavily on external sources to gather and report

research information and have structured their teams primarily to facilitate and interact with stakeholders. a typical mistake we tend to see is that organizations build a centralized ICS team while not considering what info is collected and the way it's used. To cite only 1 example, a senior commodity's manager at a significant oil and gas service expressed frustration at information he had received from a team of MI analysts in Asia that coated the day-after-day activities of class managers handling such dealing with decisions, the mandatory views were disconnected. Essentially, analysts provided info concerning what was already noted a couple of categories

### **The Role of Outsourcing in SMI**

Organizations build use of many data reasserts as input into MI reviews for stakeholders. Suppliers are the foremost obvious information source, above all via Requests for data (RFI). RFIs is also dependent in any such manner to yield elaborated worth estimation, aggressive statistics, another reasonably information that will be triangulated throughout various suppliers to supply perception into marketplace conditions. One caveat: RFIs are oftentimes biased and do currently not retexture marketplace conditions. To supplement this statistic, therefore, firms frequently enrol in secondary analysis together with alternate journals, website, and third parties. The 1/3 foremost form of out of doors statistics is financial gain statements and! noncoal stability sheets, pro-smaller set of firms at the instant are relying on external data stocked with via 1/3 celebration source Finally, a minority of corporations adopt elaborated MI reviews via cantered interviews with material experts. we tend to trust this method oftentimes provides the utmost in-intensity discourse statistics and detailed "avenue knowledge" this can be frequently secret to creating strategic sourcing decisions. the large mission right here is that few folks have the get entry to and time to song down and interview these wanted reasserts of statistics. (Exhibit 2 gives a breakdown of the various information reasserts used.) There is a developing fashion towards the usage of external resources to behavior deliver marketplace intelligence. analysis indicates that sixty 5 shares of firms are employing a few shapes of out of doors assets for SMI, and an increasing amount of them are exploitation varied parties. this is not surprising as corporations an increasing variety of acknowledge that triangulation of outcomes from quite one parties is crucial for building sturdy market intelligence. once constant message comes from multiple parties, the chance of its accuracy increases. Our survey found that the majority corporations have between one and 4 dedicated external full-time equivalents (FTE) as a part of the IM team. In some cases, these external team members are co-located. you'll work closely with the interior team to raised perceive necessities and integrate a lot of closely with the corporate and its resources. This external presence still represents a comparatively little part of MI's overall budget; 3 quarters of respondents pay not up to twenty % of their IM budget on outside resources. one or two of corporations believe heavily on external sources of information, that we tend to outline as defrayment quite 50% of their budget on outsourced providers.

### **Risk Assessment**

Almost all companies surveyed indicated that risk assessment was part of the IM team's performance, with third parties performing the majority of transaction risk assessment. In almost all cases, financial risk was the most important element tracked by MI teams. However, indicated that their risk-based MI represented less than 20 percent of total market intelligence efforts. While supply risk is important, there are clearly other forms of IM that are also considered critical in this environment.

### **Measuring the Outcomes**

The majority of our survey respondents indicated that the first ways won't to measure SMI results are ancient cost-saving measures attributed to the instrumentality category. However, we tend to believe this {can be} AN unreliable and infrequently short metric because it doesn't absolutely capture the worth of the SMI to the company. In several cases, a good SMI can be enlarged to higher inform strategic selections at plant level, capacity, sourcing, technology initiatives, and opportunities for growth and revenue generation. In many cases, the rationale is that SMI's message isn't detected within the applicable forums wherever these strategic decisions are made. To capture the complete price of AN SMI report, several corporations conduct internal client surveys once the report back to assess how well the project meets the customer's needs. Internal customers will embrace business units or practical teams equivalent to marketing, manufacturing, IT, or logistics. These surveys specialize in internal customer feedback victimization scales and open-ended queries that give a mechanism to assess how well the knowledge meets internal customer needs. The results are evaluated to grasp how well the SMI team performed and the way the method may well be improved. In many cases, the foremost vital criterion for internal customers is the speed with that they'll fill out an SMI report. Therefore, the analyst should set early expectations of what is delivered among the client's expected timeframe. it's additionally vital to conduct a radical autopsy of the process. the middle for the Study of Intelligence discerned information gleaned from autopsies ought to be obtainable as "Lessons Learned" that may be filtered back through the organization. A note on knowledge transfer of SMI findings: Most organizations we tend to spoke to try and do not effectively transfer SMI knowledge and knowledge to elements of the organization that would strategically get pleasure from that information. This is a serious flaw, underscored by the frustration expressed in many interviews we've conducted with market intelligence directors. the chance to leverage SMI in alternative elements of the business clearly represents a big and untapped opportunity for significant competitive advantage. There remains a significant gap in understanding however SMI is translated into business decisions.

### Conclusion

The decisions made during the purchase process are built on procurement market intelligence. To enable the best bargains to be negotiated, market knowledge regarding the product or material sourced, its pricing, the available suppliers, and other market information is essential. It is crucial that these characteristics are constantly updated because they are prone to change.

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### Artificial Intelligence in Supply Chain And Logistics

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### Abstract



The purpose of the thesis was to demonstrate how artificial thinking operates in the modern world, notably in the area of supply chain management. Through its kinds, the postulation's hypothetical system showed how artificial consciousness got its start.

In the hypothetical section of this thesis, the three basic types of AI—managed learning, unassisted learning, and fortification learning—are depicted. Supply chain management is significantly impacted by deep learning. This study clarified the terms inventory management, warehouse management, and logistics while concentrating on a general overview of supply chain management. This study demonstrated how artificial intelligence is advantageous for supply chain management in both its current global and Finnish contexts. With the use of common-sense models from Amazon and Amer Sports, supply chain management's use of digital reasoning revealed greater nuance. Amazon has automated its warehouse and uses computational reasoning processes for online shopping. As the daily operations of smart warehouses get increasingly sophisticated.

### **Introduction**

One of the most important components of conducting business in the digital age is artificial intelligence. It serves as a go-between for the client and the company. Currently, artificial intelligence is used by all business types to boost profits and make the best use of available resources. They are transforming their business to a scientific approach rather than employing a systematic strategy. The most precious resources in the modern world are data, which are gathered with the aid of artificial intelligence. These facts serve as the foundation for business planning. Artificial intelligence has the potential to increase productivity, reduce time spent on tasks, detect fraud, and provide customers with round-the-clock assistance.

Accenture estimates that the use of artificial intelligence in the workplace could boost productivity by at least 40%. According to figures from the World Economic Forum, by 2022, AI will have replaced more than 75 million human jobs while also creating 133 million new ones. This dispels the myth that the adoption of AI will result in an increase in the number of unemployed people.<sup>4/7</sup> customers received service.

Businesses can no longer rely on conventional business techniques to promote growth given the massive amounts of data that are now readily available and the constantly changing preferences and complexity of customers. These significant adjustments have created new opportunities for applying AI to provide meaningful insights from client data to boost corporate success.

Chain is a network that connects every aspect of a firm, including production, purchasing, shipping, sales, and marketing.

Recent pandemics and other geopolitical upheavals have shown how vulnerable supply chains may bring entire companies down. As a result, many businesses are investing in digital technologies to improve their supply chain processes.

A well-liked technology called artificial intelligence (AI) is making every industry smarter and more durable. By 2026, it is anticipated that the global market for supply chain AI would reach \$13.5 billion.

### **Artificial intelligence in supply chain**

#### **1. Supply chain automation**

Without AI, modern supply chain automation is not possible. Robotic warehouse workers, autonomous cars, robotic process automation (RPA), and other supply chain automation technologies can automate repetitive, error-prone, and even semi-technical jobs thanks to AI.

The tasks listed below in the supply chain can be automated using AI:

Using digital workers who mix conversational AI with intelligent automation, back-office chores like document processing can be automated.

AI may be used to automate supply chain transportation as well. Autonomous truck technology are being heavily invested in by businesses like Amazon, Simple, and Nuro.

Another application of AI in supply chain management is warehouse automation. Cobots and other AI-enabled technologies are advancing warehouse management's effectiveness, productivity, and security. One of the top participants in the warehouse automation market is Ocado.

## **2. Accurate predictive analytics/forecasting**

Managers of supply chains would like to know how demand, market trends, etc. would develop in the future. Additionally, even if no forecast is foolproof, using AI can aid managers in producing more precise forecasts.

Applications for demand forecasting with AI capabilities can greatly improve forecast accuracy. High level accuracy has several advantages, including but not limited to: better estimation of the ideal inventory level.

unique regions' specific inventory needs.

less variation in demand and supply along the supply chain. lowering backlogs and stock shortages, as well as storage expenses.

## **3. Enhanced supplier relationship management**

Weak supplier relationship management is a major contributor to many of the current problems in global supply chains. During the global pandemic, several supply chains, including those in the food and automotive industries, experienced severe interruptions as a result of a lack of communication and integration with suppliers.

Supplier relationship management (SRM) can be made more efficient and consistent with the aid of AI. SRM software with AI capabilities can help with supplier selection based on criteria like cost, previous purchasing history, sustainability, etc. AI can also be used to rate suppliers based on performance evaluations.

Automation of typical supplier communications, such as invoice sharing and payment reminders, can be aided by AI.

Automating these processes has the benefit of avoiding foolish hitches brought about, for instance, by not paying a vendor on time and having a detrimental impact on shipment and output.

## **4. Computer vision in supply chains**

Supply chains are altering as a result of AI-enabled computer vision systems. Computer vision offers a wide range of applications in supply chain optimization, from bettering quality control to inventory management.

For example, AI-powered computer vision systems can automate and enhance final product quality assurance. Watch how BMW scans vehicle models on the production line using computer vision.

Artificial intelligence and computer vision-enabled bots can be used to automate monotonous inventory management operations, like real-time inventory scanning.

## **5. Improving sustainability**



Since a company's supply chain generates the majority of its indirect emissions, sustainability is a significant concern for supply chain management. AI can help supply chain operations be more sustainable and environmentally friendly.

AI can assist in gas-saving logistics route optimization. The UPS project uses AI/ML models to accomplish this.

Accurate demand forecasting using AI can help reduce waste, carbon emissions, and inventory levels throughout the supply chain.

### **Challenges of AI in Supply Chain**

#### **System Complexities**

The majority of AI systems are cloud-based, and therefore need a lot of bandwidth to function. Operators may occasionally need specialized hardware to access these AI capabilities, and many supply chain partners may need to make a sizable initial investment to purchase this technology.

#### **The scalability factors**

The difficulty here is the number of early start-up users or systems required to be more significant and effective, despite the fact that most AI and cloud-based solutions are extremely scalable. This is something that supply chain partners will need to thoroughly discuss with their AI service providers because every AI system is distinct and diverse.

#### **The cost of training**

Similar to any other new technological solution, training requires a substantial time and financial investment. The supply chain partners will need to collaborate with the AI providers to provide an effective yet economical training solution throughout the integration phase, which could have an influence on business productivity.

#### **The operational costs involved**

An amazing network of individual processors power an AI-operated machine, and each of these components requires upkeep and repair from time to time. The difficulty in this situation is that the operational investment could be rather large given the potential cost and energy involved. Manufacturers would also need to replace these, which might significantly increase utility costs and have a negative impact on operating expenses.

### **Artificial Intelligence is disrupting logistics**

The logistics industry has been transformed by artificial intelligence. The following are four ways artificial intelligence-driven technology can help firms improve and reinvent their logistics.

#### **1. Self-Driving Vehicles**

Autonomous or self-driving vehicles have the potential to greatly improve delivery efficiency. By autonomously moving goods from factories, retail locations, and distribution hubs to their destinations, self-driving automobiles will save delivery times and shipping costs. They also increase data collecting, sharing, and integration to guarantee an optimum operating system. By removing transportation obstacles and difficulties, this technology will boost the effectiveness of the distribution process.

#### **2. Robotics**

Robotics is a phrase used to describe the use of intelligent machines in supply chain management. Routine jobs including delivery, transportation, storage, picking, packaging, and routing can generally be performed by robots. The ability of AI-assisted industrial robots to complete increasingly complicated tasks autonomously sets them apart from traditional industrial robots. Robots that are intelligent can advance by taking on new tasks and performing challenging tasks. As a result, the distribution process will become more successful, predictable, and controlled as a result of the equipment's ability to partially replace humans in the process.

### **3. Big Data**

Like any other industry, logistics produces a lot of data. Data administration will become increasingly difficult without a properly maintained system. By syncing data from numerous sources, including drivers' applications, devices, and systems, and assessing how various factors affect the delivery process, businesses may save money and prevent late shipments and deliveries. Organizations may take into consideration factors like fleet maintenance schedules, vehicle sensors, bad weather, and fuel prices using AI-driven data analytics. It enables businesses to lower their logistics costs by providing drivers with crucial data points that help them move more efficiently.

#### **Benefits of AI in Logistics**

In order to speed up shipments, AI technology is continuing to profoundly disrupt the logistics industry. Artificial intelligence's role in logistics has many benefits (AI). Artificial intelligence can help at every stage of the logistics process.

#### **1. Accurate Inventory Management**

Artificial intelligence-driven technologies have a lot of potential for use in inventory management due to their ability to handle massive amounts of data. The order in which products enter and leave a warehouse can be helped by accurate inventory management. There are many inventory-related factors, including order processing, picking, and packing, which can take a long time and be error-prone. Effective inventory control can help prevent overstocking, understocking, and unanticipated stockouts.

#### **2. Increase Warehouse Efficiency**

Artificial intelligence is changing warehouse processes, including data collecting and analysis, inventory management, and allowing firms to operate more effectively and earn more money. In warehousing, AI is used to estimate demand, modify orders, and reroute goods while they are in transit. In reaction to these forecasts, you may adjust your order placements and arrange for the delivery of in-demand goods to adjacent warehouses as necessary. AI can connect the chain's many warehouses to find the most effective way to move the inventory if there are several of them. You may provide better customer service and spend less on warehousing when demand for particular products is anticipated and logistics are planned well in advance.

#### **3. On-Time Delivery**

AI systems can decrease the need for manual labor, accelerating, securing, and improving the overall process. This enables the consumer to receive their order on time and in compliance with the contract. One-way artificial intelligence is used in the logistics industry to enable on-time delivery is through smart roads. Faster deliveries are the outcome of smart roads' enhanced contribution to road safety as well as their reduction of logistical problems and delays brought on by bad weather. Sensor-equipped roads can monitor traffic numbers and patterns and warn cars of imminent gridlock.

Cost-effectiveness assurance is a crucial component of supply chain management. Your bottom line can be considerably impacted by cutting expenses across your supply chain operation, particularly if your present net profit margins are in the single digits.

Which business doesn't love enhancing profits without having to do anything to boost sales?

Another benefit of pursuing cost savings as a headline objective is that you'll see benefits across the board. A more cost-effective supply chain will improve overall supply chain performance, meaning you could:

Reduce lead times and deliver products more quickly to the required places

Improve order fulfilment procedures to raise client satisfaction.

### Conclusion

One of the best methods for optimizing supply chain and logistics operations is to use new technologies. In the logistics sector, AI has several uses. This revolutionary technique is being used by companies all over the world. Numerous crucial processes can be accelerated and simplified thanks to artificial intelligence. Regular tasks that would take a long time to complete manually can be automated to boost efficiency, accuracy, and reduce the possibility of human error. Because of this, incorporating AI into the logistics industry has the potential to lower costs while raising customer satisfaction.

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### Impact Of Mobility Solutions on Logistics Services

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### Abstract

Logistics and supply chain have improved globally over the past few years. There has been significant evolution in logistics, because many logistics companies have adopted technology in their structures, which has enhanced their ability to respond to modern logistics needs and market demands. The fourth industrial physical process has brought changes with technological innovations that have created efficiency in the logistics sector globally (Salvage, 2003). Technological development and innovation in the logistics sector by creating efficiency and ease of movement of goods and services have intensified proper and smart logistics. In this study, the general conclusion is that technology in logistics has enhanced efficiency by creating more transparency by logistics companies and customers. Manufacturing companies and producers can concentrate on producing product while subletting the role of logistics and transport to specialized logistics companies. The most common types of logistics companies are 3PL logistics companies that have increased in popularity and presence worldwide (Salvage, 2003). Such companies utilized advanced technologies to enhance the perceptibility of their product, communication with their customers, and warehouse management. This study has also concluded that technology has a crucial role in the logistics sector's future. Several technological developments have been used in logistics to date, which provides context to realize that it will continue to create ratio and fastness.

**Abbreviations And Terms:** Iot -Internet of Things, Ant- The Actor Network Theory, Scot- The social construction of technology, CPS- Cyber-physical system, RFID- Radio frequency identification C2C-

Customer to customer, GPS- Global positioning system, Maas- Mobility-as-a-service, 1PL First party logistics ,2PL Second party logistics, 3PL Third party logistics, 4PL Fourth party logistics ,5PL Fifth party logistics

### **Introduction**

Mobility in logistics and supply chain refers to the movement of goods and services from production to consumption including all the intermediaries facilitating this movement with the evolution in technology and logistics, mobility in logistics and supply chain has advanced over the past few years. Logistics and supply chain have also been majorly affected by the entry of different players in the market, especially third parties that have helped in offering a new lease of life to companies by taking their logistics for them. Logistics companies have focused on various element in the past few years, including cost reduction, revenue maximization, customer services, and customer satisfaction. The expected outcome of this study is a research paper that analyses the various technological advancements in mobility in logistics that have improved the sector and created better results for logistics companies. A narrative literature review is important because it helps by fast creating a theoretical mode that can be used to analyze information in a particular context. The stakeholder theory argues that many people with different interest affect the operation if any business unit that must be satisfied for the business units to operate efficiently and effectively. The forces between people in social system do not exist in dependently, meaning people determine what relationship and interactions they have within their social system-the actor-network theory.it posits that human being and their actions determine the advancement and development in technology because people developing these technologies only respond to the market needs and trends-social construction of technology. Therefore, understanding the details in technological development in logistics and supply chain is important in understanding the evolution of this sector.

### **Logistics Service Standard in The Digital Age:**

Logistics 4.0 refers in using technological and trading features to interconnect, network and integrate logistic services within and outside the production company to link better the customers. A critical element of logistics 4.0 is cyber-physical system (CPS), A system which has technologies and interconnected system that enable communication and interaction between different stakeholders' team they are a couplet value chain. This creates more transparency in logistics especially in movement of goods and services because every stakeholder can see the position of goods and services in real time. Autonomous decision making is critical because it helps serve time in the decision-making framework to make, best decision in a particular situation.

### **4pl and 5pl Logistics:**

4PL and 5PL Logistics which include complete logistics management by an external company that acts as a real agent and partner to the customer. In both 4PL and 5PL Logistics, this company undertakes the entire supply chain value chain from the point of departure from the production zone to the point of delivery to the customer. Therefore, a manufacturer will outsource their entire logistics value chain to an external business, normally a 4PL and 5PL Logistics entity, to deal with the customers directly. The effect of 4PL and 5PL Logistics are more efficiency in the market, increased customer satisfaction, increased business efficiency and satisfaction, and faster decision making within the business entity. The customers have a higher level of mobility especially switching from one business to another due to loss switching costs and more access to information. This type of logistics makes

sure that such switching does not happen because the customers are increasingly satisfied and can see their products in real-time.

### **Introduction To 3 PL Logistics**

Third party or 3 PL logistics is used with interchangeable fulfilment warehouse or center as they need to focus on business elements like production and efficiency creation in management. Such elements like logistics involved in ensuring that the customer knew where the product is at any time because few companies may not have proper skill sets and persons to tackle the issues. It acts as one of the e-commerce fulfilment companies and provides services that are to be outsourced includes warehousing, picking and packing, shipping and receiving, reverse logistics, inventory management and so on. This fulfilment may differ between companies, as some are well versed for cold fulfilment as they store frozen products. And other 3 PL companies may deal with hazardous materials. The fulfilment which provides the parties with heavy and high value products are referred as Red Stag fulfilment. The providers of third-party logistics manage inbound as well as outbound logistics of clients. They may lease those warehouse spaces not on their own but make contract with other carriers for shipping purposes.

### **Hertz And Alfredsson Describes 3 PL Providers into Four Categories:**

Standard 3 PL provider: It is the basic form which performs activities of pick and pack warehousing and Distribution. Service developer: Here they offer their customers with advanced value-added services like tracking and tracing, specific packaging and unique security systems. Customer adapter: They provide services on request of the customers and takes over complete control of the company's activities in logistics. Here there is only small customer base. Customer developer: It's the highest level where they attain with regard to its activities, as this could be possible when the provider integrates with the customer themselves. Though they have few customer bases, they will perform detailed tasks.

### **Practical Examples Of 3 PL Logistics**

#### **Amazon**

This has invested in 3 PL logistics through the usage of drones and leveraging C2C logistics. As it gained license to operate drone services, it has gained lots of competitive advantage before it could deliver the product faster. As a C2C business, it facilitates logistics for products by allowing exchange of products among themselves in order to focus on their primary business. They use several technologies including robotics, artificial intelligence and tracking systems.

### **Practical Examples Of 3pl Logistics Application**

#### **Drones**

The uses of drones in logistics have become a major trend as it has enabled business to be more productive and efficient. Many drug companies have reached higher by the help of logistics as they offer better services and those companies are internet companies that specialize in technological advancements. The services of drones in logistics have creative changes in the organization of the markets.

#### **Cloud Logistics**

Moving logistics to the cloud is an effective way to ensure that global logistics can be managed from anywhere by having a real-time understanding of every aspect of their logistics value chain. All



logistics companies can operate globally because all members of the company can see this cloud computing and all data is kept on cloud servers

A critical element of the logistics value chain is synchronizing information, making predictions, and synchronizing activities within the logistics value chain. Cloud logistics allow these activities to end because all changes and manipulations to the cloud data can be done from any point. The only difference is that different people have different access levels within the system, meaning those who can edit all the data will be necessary. There is better monitoring of the logistics and employee activities with the system, ensuring that logistics values and quality are not compromised. Cloud logistics creates efficiency while keeping costs low and ensures synchronization and monitoring on a global scale.

### **Trend Logistics Service Practices in Modern Business**

#### **Result Of Applied Analysis**

Results collected in this study have demonstrated that global logistics has banned the logistics companies' efficiency because manufacturing companies are continually moving away from logistics and delegating the logistics activities to third-party companies. This has led to the development of 3PL, 4PL, and 5PL logistic companies (Wang, 2021). Although they are all similar because of the level of automation and technology they use and their relationship with their customers, these companies operate in different circumstances. They are close to the customer and use technology that allows them to manage inventory and employees within the value chain. Therefore, the results have shown that mobility technology is important in logistics because it helps in facilitating the easy movement of products and people within the logistics value chain. The results of this study are multidimensional, as discussed below. The first result is that different forms of mobility technologies have been adopted in the logistics sector and continually influence the value delivered within it. The technologies are implemented across business lines, including 3PL, 4PL, and 5PL logistics companies. Examples include the use of drones, robotics, artificial intelligence, warehousing technology, bar-coding, common GPS tracking, cargo space sharing platforms, and customization platforms (Wang, 2021). All these platforms are enabled by technology, which is a product of the fourth industrial revolution. The results indicate that all these forms of logistical efficiency systems help him deliver value to the customer. The theories discussed in this study show that technology develops because customers want to develop and have more efficiency, not because their businesses want to develop.

#### **Conclusions And Future of Smart Logistics**

As demonstrated through the study, smart technologies have become commonplace in the logistics sector, with several technologies developed to enhance efficiency and speed in the sector. In the global supply chain, businesses have adopted a range of systems that ensure stakeholders in logistics, including communication, warehouse management, customer relations, and enterprise resource planning systems.

This makes the supply chain framework more efficient and transparent in the global logistics sector. This study has shown examples of businesses that have successfully employed technological advancements in improving their logistics services. The fourth industrial revolution and logistics 4.0 have interacted effectively to ensure that developments create more efficiency in the supply chain and customer satisfaction. With the technological advancements in companies like Tesla, Uber, and



Amazon, there is a potential for more technological infusion in logistics and supply chains, which means more development in smart logistics.

There have been critical advancements in robotics, which means businesses can enhance the efficiency of their services through the use of new logistics and supply chain robotic technologies. There has also been increased use of artificial intelligence in logistics businesses, which has enhanced the ease of tracking and communication with customers. Barcoding and other warehouse technologies have also enhanced the warehouses' ability to improve security. These technologies will expand in the near future in the logistics business. The main challenge that logistics businesses face with these technologies is incorporating human beings into technological development.

Ensuring that the role of labor is clearly defined is important while the logistics sector takes on more technology and automation. Before the COVID-19 pandemic spread to the world, online commerce was not so widely popular. In the face of the lock-down situation, with the closure of most of the stores, more customers are turning to online shopping, especially with the increasing demand for basic consumer goods. This trend will increase due to the convenience of this type of purchase. To be able to meet the growing needs for transportation of online purchased goods, the logistics sector must and will maintain and expand its resources to be able to integrate suitable mobility solutions for fulfilling the required number of shipments to its customers, manufacturers, and traders. Logistics is evolving. Continuous innovation completely changes the working processes.

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### Evaluating Strategies for Cost Reduction in Supply Chain Management.

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### Abstract

Supply chain management and cost-cutting strategies emphasize on figuring out the most efficient and cost-effective ways to buy and store items, transport them from one location to another, and ensure customer satisfaction. Lowering supply chain management costs, on the other hand, includes more than merely selecting the cheapest items and carriers. Every stage of the order fulfilment process is expensive and might use cost-cutting strategies. Controlling supply chain expenses is one of the most effective methods to improve your company's bottom line, and thankfully, there are some pretty basic things you can do to achieve this aim. But, before you adopt a cost-cutting attitude, you should first

comprehend where to focus your efforts since making the proper reductions in the right locations will result in the greatest returns.

### **Introduction**

All procedures that turn raw materials into finished commodities are included in the management of the flow of goods and services. All procedures that convert raw materials into finished items are included in supply chain management (SCM), which is the centralized control of the flow of goods and services. Companies may reduce unnecessary expenditures and expedite the delivery of goods to customers by optimizing the supply chain. Companies that practice effective supply chain management avoid costly recalls and legal proceedings as well as the media spotlight.

The administration of the movement of products and services between companies and locations is known as supply chain management, or SCM, in the business world. In an interview with the Financial Times in 1982, Keith Oliver, a consultant with Booz Allen

Hamilton, popularized the phrase "supply chain management." Wolfgang Partsch's "Supply Chain Management project," which was executed, was initially published in 1983 in Wirtschaftswoche in Germany.

Developing a plan, locating raw materials, production, distribution, and returns are the five SCM components that are most important. Controlling and lowering expenses while preventing supply shortages are the duties of a supply chain manager.

### **5 Parts of SCM**

The supply chain management strives to keep prices low and shortages to a minimum. The work entails more than just logistics and inventory acquisition. Productivity and efficiency gains can have a direct impact on a company's bottom line. Good supply chain management keeps firms out of the news and away from costly recalls and litigation. The supply chain manager coordinates the logistics of all aspects of the supply chain, which comprises of the five components listed below.

#### **Planning**

SCM often begins with planning to align supply with customer and manufacturing demands in order to get the optimum results. Firms must forecast their future demands and act accordingly. This pertains to the raw materials required at each stage of manufacturing, the capacity and constraints of equipment, and the manpower requirements throughout the SCM process. Large organizations frequently rely on ERP system components to combine data and generate plans.

#### **Sourcing**

Efficient SCM operations rely primarily on strong supplier relationships. Working with vendors to deliver raw materials required throughout the production process is what sourcing implies. A corporation may be able to prepare ahead of time and collaborate with a supplier to get items. However, various sectors will have distinct sourcing needs.

Generally speaking, SCM sourcing entails making sure:

- The raw materials fulfil the manufacturing specifications required for product manufacture.
- The prices paid for the commodities correspond to market expectations.
- Due to unanticipated situations, the provider has the ability to deliver emergency products.
- The seller has a track record of delivering high-quality items on schedule.

- Supply chain management is extremely important when working with perishable items. When sourcing items, businesses should consider lead time and how successfully a supplier can meet those requirements.

### **Manufacturing**

The organization alters raw materials by utilizing equipment, manpower, or other external forces to create something new, which is at the core of the supply chain management process. Despite not being the last step in the supply chain management process, this end result is what the manufacturing process ultimately aims to produce. Sub-processes inside the production line, such like assembly, inspection, inspection, or packaging, may be further broken down. A company must be aware of waste and other manageable issues during the production process that might lead to changes from the original intentions.

### **Delivering**

A business must put its goods in the minds of its customers after manufacturing and closing sales. As the consumer has not yet interacted with the goods, the distribution process is frequently viewed as a contributor to the brand's image. A organization having effective SCM procedures has strong logistical skills and delivery channels to guarantee the timely, secure, and affordable delivery of products.

### **Returning**

Support for the goods and client returns round out the supply chain management process. It's terrible enough when a consumer has to return a product, but it's even worse when it's due to a mistake on the side of the firm. This return procedure is commonly referred to as reverse logistics, and the firm must verify that it is capable of receiving returned items and appropriately assigning reimbursements for returns received.

Whether a corporation is undertaking a product recall or a consumer is just unhappy with the goods, the customer interaction must be resolved.

### **Key features of effective supply chain management**

The supply chain is the most obvious “face” of the business for customers and consumers. The better and more effective a company’s supply chain management is, the better it protects its business reputation and long-term sustainability. IDC’s Simon Ellis in *The Path to a Thinking Supply Chain* defines what supply chain management is by identifying the five “Cs” of the effective supply chain management of the future:

Connected Access to unstructured data from social media, structured data from the Internet of Things (IoT), and more conventional data sets accessible via standard ERP and B2B connection technologies.

### **Collaborative**

Improving supplier cooperation increasingly necessitates the use of cloud-based commerce networks to enable multi-enterprise collaboration and engagement.

#### **1. Identify Costly Workflow Inefficiencies**

Stop relying primarily on transportation costs to discover hidden charges in supply chain management. Instead, Logistics Bureau advocates tracking the complete order fulfilment cycle from beginning to end.

The objective is to increase efficiency so that more orders may be appropriately handled and sent each day. Look for bottlenecks in the process or situations when staff must manually accomplish a job that may be automated instead.

## **2. Diversify Your Carriers or Modes**

Selecting a dependable and reasonably priced carrier is not a one-time event. If you aren't continually creating connections with carriers and collecting quotations for various services, you may be losing out on competitively priced solutions. Failure to diversify your carrier partnerships also puts your firm at danger of being left in the lurch if your lone carrier goes out of business unexpectedly. You will undoubtedly lose money if you are unable to keep your clients satisfied by delivering their items, therefore a lack of carrier diversity puts you in a losing situation.

Instead, offer yourself greater control over the supply chain by having many carriers available. Furthermore, Freight Quote suggests intermodal or multimodal transportation to save fuel expenses by placing the item on a train for the interstate or cross-country portion of the voyage and then moving it to a truck for regional or local delivery, you may sacrifice a day or two in shipping timeframes while saving money overall. Water transport is another potential alternative in various parts of the nation.

## **3. Pay for the Right Transport Service**

Selecting a dependable and reasonably priced carrier is not a one-time event. If you aren't continually creating connections with carriers and collecting quotations for various services, you may be losing out on competitively priced solutions. Failure to diversify your carrier partnerships also puts your firm at danger of being left in the lurch if your lone carrier goes out of business unexpectedly. You will undoubtedly lose money if you are unable to keep your clients satisfied by delivering their items, therefore a lack of carrier diversity puts you in a losing situation.

Instead, offer yourself greater control over the supply chain by having many carriers available. Furthermore, Freight Quote suggests intermodal or multimodal transportation to save fuel expenses by placing the item on a train for the interstate or cross-country portion of the voyage and then moving it to a truck for regional or local delivery, you may sacrifice a day or two in shipping timeframes while saving money overall. Water transport is another potential alternative in various parts of the nation. If you still want to provide this option sent FTL, you can always pass the cost of quicker delivery on to the customer. Small deliveries that can endure a few pits stops (because other companies' deliveries will be coupled with yours) can be carried LTL at a lower cost than FTL.

## **4. Forecast Demand with Sales Planning**

Sales forecasting enables you to plan ahead of time to avoid product shortages. Customers who don't want to wait for an out-of-stock item will go to a rival instead. Forecasting, on the other hand, keeps you from squandering money by producing or acquiring too much of a commodity. Forecasting is one of the finest supply chain optimization tactics when done correctly: Don't buy or transport anything you can't sell. However, it is easier said than done because there is no way to totally forecast the future. Previous sales trends, forthcoming marketing initiatives, and new rivals all impact demand. An skilled sales forecaster may need a fair wage, but they may be able to pay for themselves and still save your firm money if they do. Previous sales trends, forthcoming marketing initiatives, and new rivals all have an impact on demand. An experienced sales forecaster may need a good wage, but if they perform their work properly, they may pay for themselves while also saving your organization money.

## **5. Reduce Product Packaging**

Goods packaging serves a crucial purpose: it protects the product during transit and offers an eye-catching surface for listing features and specifications, which helps sell the product. Packaging, on the

other hand, influences how many things can fit into a box. There are only so many boxes that can fit in a freight container, especially if you choose FTL shipment.

Observe how frequently PC games were sold in the 1990s and early 2000s for an excellent example of frivolous product packaging. Large cardboard boxes with fascinating representations of game action contained only a tiny CD. Companies who offered PC games in CD cases or DVD boxes significantly boosted the number of games that could fit in a single box, lowering the time it took to load and unload trucks at the warehouse and the number of trucks required in the first place.

Reduced product packaging saves money on packaging materials as well as printing expenses. It's a win-win situation and one of the most effective cost-cutting strategies in supply chain management. Find the best approach to send your items without destroying them, because you will lose money for each product that does not reach at its destination in good condition.

### Conclusion

Cutting costs is crucial for any company, but it should never be at the price of quality. Investigations should be done into every component of the distribution chain since the potential earnings are substantial. A thorough examination of logistics providers and shipping processes, as well as inventory placement in your warehouse, serves an organization's best interests.

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## Conceptual Study on Impact of Covid-19 Pandemic On Aviation Industry

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### Abstract

The Covid 19 pandemic hit the aviation industry was hit hard by the COVID-19 and now only it is beginning to recover. It is very hard to visualize a world without flying. That's exactly what happened in March 2020. The aviation sector was sent into a tailspin as a subsequent the outbreak of COVID-19, airports, air spaces and borders were closed. The pandemic creates a worst hit on the aviation industry where many airlines forced to suspend or close their operations nearly for eight months, troublesome supply chains worldwide and demanding millions of jobs.

The aviation industry has suffered in a distinct way. First, there is a fear of infection among the employees and customers, The closeness with strangers for hours potentially carrying the infection from one geography to another. Second, there was a sharp deterioration in travel across the domains of business and tourism. With no vision of immediate cure or vaccine, the pandemic will likely to continue the challenge our regular lives and air travel in particular.

### Introduction

Approximately 4 per cent of the global gross domestic product (GDP) contributed by Aviation Industry and nearly supports more than 65 million jobs around the world <sup>[1]</sup>. In 2020 it would have seen above 40 million commercial flights take to the skies carrying 4.7 billion passengers and more than 65 million



tons of cargo. The pandemic irrevocably changed the aviation industry. In the aviation sector history Covid 19 pandemic crushed many aircraft, wiped the billions of industry revenues and millions of jobs. It also primarily brings changes in consumer behaviour overnight. The travel and tourism industry has faced more than USD 1 trillion in profit and nearly close 200 million jobs in 2020<sup>[2]</sup>. The International Air Transport Association (IATA), Airport Council International (ACI) and International Civil Aviation Organisation (ICAO), the three principal representatives and custodians of the aviation industry globally, forecast that the sector will take at least three to four years to roll back to 2019 levels<sup>[3]</sup>. The recovery is expected to be slow, uncertain, and inevitably, painful.

### **Challenges faced during Pandemic**

#### **Regulating the financial system**

Proper regulations need to be taken across the world for the factors like outlook of weak demand, poor revenues, service costs of high asset and low liquidity in a perfect storm. The airports may get compensate on its current business models without imposing an additional charges burden on airports' principal users- airlines, customers and commercial businesses which reflects a key challenge for regulators. In certain cases, they also must take difficult decisions in impartially and equitably transferring airport assets such as slots and real estate.

#### **Managing the imminent investments**

High progress markets like India have shaped capacity to encounter consistently growing demand for air travel over the past two decades. The airports capacity has built upfront or being formed with substantial costs previously incurred. When the long-term view for development remains strong in air markets like India, the next three to four years are going to pose important challenges for airport owners and investors to earn revenue from assets or repurpose them to generate shareholder value. In certain cases, competition from novel asset-light airports may also pose an additional challenge on asset rebalancing and revenue generation.

#### **Rationalization of commercial travel**

Though markets recover, the cumulative acceptance of technology and work-from-home practices are significantly reduced demand for commercial travel. Some professionals guess this may be more than 40 per cent, as workforces and traditional jetsetters become happier with better and cheaper technology and hybrid workspaces. The need to preserve money and reduce costs in the long run will strengthen such behaviors as businesses struggle to restore revenues and values for shareholders. Airlines and airports were resisted with this new normal, innovate and reorganize their progress strategies accordingly.

#### **Fall in market revenues**

The essential for social distancing and individual hygiene while travelling significantly offended passenger spends within terminals. Commercial or non-aeronautical incomes are a high source of income in airports businesses, nearly 50 per cent of overall profits in many airports. A great proportion created by duty-free retail, which has entirely dried up with limited or inattentive international footfalls. Loss of Job, salary rationalisation, reduced economic progress and lower disposable incomes are likely to intensify the impact in the future reducing footfalls at airports and airlines. Airport owners have to transform their commercial business and functioning models to deal with this novel reality but will be assisted by development in technology and the growing popularity of digital platforms.



**Market distortion**

During the pandemic, the Airlines have suffered tremendous losses in revenue, threatening the persistence of many, particularly the nature of the business such as low margins, high capital expenditure, cash consuming, and with extended paybacks. Financially solvent governments (U.S., Germany, Singapore, U.A.E., Japan among others) have stepped in to provide relief to numerous national transporters through grants, soft loans, credit guarantees and other forms of support. Private transporters will not get equal beneficiaries in such markets with minimal or no support at all from officials or governments potentially competitive stiffness and annoying market distortions that can impact both choice and charges for flyers in near future.

**Opportunity to reimagine****Renovate the functional prototype**

Technology can simplify a broad revamp of the operating model for greenfield assets. For example, touchless check-ins, RFID bag-tags, contactless and paper-less immigration and boarding processes can largely obviate the need for large passenger concourses and check-in areas and release more monetizable commercial spaces. Sustainability is a associated theme that can improve asset productivity and unlock value by effectively dealing life-cycle costs. Another important consideration would be to find the right stability between flexibility and efficiency.

**Use effective technology**

In this digital world, bytes carry high value than bricks if we know how to use effectively. Investing in the correct methos and technology can help monetise assets better but also significantly improvise the operating efficiency and customer experience.

**Refocus on the cost-line**

Innovations in technology, design and investment can significantly modify the price of providing services for both airlines and airports. It will help to deliver more bang for the responsibility and cushion the stress on both affordability and profitability. Solar powered airports, electric bussing, green buildings and recycling can engender significant savings in operating costs and could become the norm for the best performing airports.

**Collaborate**

Airlines and airports have often been opponents in a commercial ecosystem but may have a lot to gain from each other in a demand-constrained, price-sensitive market. Allocation of data could be the key driver to maximising value and sharing gains from common benefits. It will help to extend the business beyond airport limits but also help to optimise costs while providing good value for passengers and airport users.

**Bring Modernization**

History has shown us that crises have often created the best inventions and innovations. The enormous value of data and technology that we have used today cannot be overstated. They act as perfect levers to invent and innovate solutions that can boldly take on a world shaped by instability, uncertainty, ambiguity and complexity. So, in future the airports may bring modern technologies instead of the traditional progresses. The industry may focus on bio-fuelled planes, satellite-based navigation systems and integrated departure and arrival areas in a digitally enforced airport.

**Role of Government to unfold the situation**

The pandemic irrevocably changed the aviation industry. In the history of aviation sector, Covid 19 pandemic crushed many aircraft, wiped the billions of industry revenues and millions of jobs. It also primarily brings changes in consumer behavior overnight. The role of governments seems to be exclusively important on how the situation discloses. Governments can act in order to reduce the high risk that travelers foresee for the coming years regarding the consumer behavior. Governments may enforce new air travel restrictions to tackle outbreaks. Analyze the consumer behavior towards airlines and act accordingly. Most of the airlines focus on its current business models and the thin margins which creates an impact on a change in behavior.

### Conclusion

As an industry, aviation has attained so much. Airlines consider as one of the most consistent and safest modes of transportation in the world, it has also contributed exponentially to societal and economic development. The aviation industry undoubtedly attracts its passengers through desirability of travel and connecting places with people along with effective cost structure and quick methods of transporting cargo. However, in spite of these unexpected setbacks and supreme circumstances, as we all emerge and recover from the pandemic, one thing has become vibrant: the aviation industry has a great opportunity for transformation. The pace of some technological advances was already in the pipeline to speed up exponentially. The new business models implied with automation and growing travel demand are glowing the emergence of a new era which ultimately results efficiency and environment at its core.

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## A Conceptual Study on Impact of Covid-19 Disruptions On The Supply Chain Management: Rethinking From India

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### Abstract

Supply Chains play very important role in driving the economy of the country. COVID-19 pandemic and subsequent lockdowns have disrupted the supply chains of various firms. It has been estimated that the total cost of supply chain disruption due to COVID-19 and geopolitical tensions is around \$4 Trillion for US and European firms (*Total Cost of SupplyChain Disruption*, n.d.). This cost

highlights the need to study the impact of COVID-19 on the supply chain function of companies and also explore the efforts made by the firms to mitigate the same.

### Introduction

The COVID-19 outbreak was declared as a Public Health Emergency of International Concern on 30<sup>th</sup> January 2020 and was declared as Pandemic on 11<sup>th</sup> March 2020 by World Health Organization (WHO) (*WHO Director-General's Opening Remarks*, 2020). With this declaration, the struggle to keep a balance between life and livelihood started. The COVID-19 pandemic forced many countries to take extreme measures such as lockdowns to contain the spread of the disease. It is estimated that around 2.6 billion people were under some kind of lockdown during the initial phase of spread of COVID-19 pandemic (*Lockdown Is the World's Biggest Psychological Experiment*, 2020). In India, one of the most stringent lockdowns among all the countries was imposed on 24<sup>th</sup> March, 2020 for 21 days (*Coronavirus in India*, 2020).

The closing of borders, restrictions imposed on trade and other containment measures resulted in the disruption of the supply chains (*Impact of COVID-19 on People's Livelihoods, Their Health and Our Food Systems*, 2020). From sourcing of raw materials to subdued demand added to the woes of the firms who were forced to recalibrate their strategy to counter the uncertain circumstances. The firms faced many challenges such as lack of demand (*Kasliwal*, 2020), labor shortages (*Nag*, 2020). This hit the manufacturing and services industries both alike. The manufacturing activities contracted sharply in the month of April, 2020 when lockdown was imposed (*Suneja*, 2020). The pandemic laid emphasis on the need to upgrade the elements of traditional supply chain models. The centrality of China as a manufacturing hub of the world can be gauged from the fact that out of 500 firms of Fortune Global 500, 200 firms had presence in Wuhan (*Managing Supply Chain Risk and Disruption*, n.d.). The firms employed different strategies to mitigate the effects of COVID-19 pandemic induced disruptions. According to survey conducted by McKinsey, 93% of the senior supply chain leaders showed their willingness to make supply chains more agile and resilient. The impact of pandemic on different sectors of the economy and functions has also captured the interests of academicians. The following section highlights the academic research done to assess the impact of COVID-19 pandemic in the global as well as Indian context.

### Research Gaps

Various studies have been carried out to assess the impact of COVID-19 pandemic on different aspects of the supply chain and related areas in India. Some of these studies focused on the food supply chain (Lowe et al., 2021), disruptions in food supply chain (Mahajan & Tomar, 2021) and from societal perspective (J. Sharma et al., 2021). The focus of these studies was on food supply chains. Another study (A. Sharma, Gupta, et al., 2020) focused on healthcare supply chains whereas (Khanna, 2020) evaluated the impact on migrant population. (Narasimha et al., 2021) in their paper evaluated the impact of COVID-19 on transportation and maritime supply chains. The academic community has carried out the research work related to the supply chain resiliency, however, the challenges faced by the industry due to COVID-19 pandemic and their response to that can provide more research opportunity to academicians.

### Objective of Study

1. To examine the disruptions caused by COVID-19 pandemic in value chains of different sectors.
2. To study examines the challenges faced by the industry.

3. To suggest opportunity areas where research can support efforts in industry to improve supply chain resilience.

### Scope of the Study

The study examines the challenges faced by the firms during the period of March, 2020 to May, 2021. It captures the impact and mitigation effort by the firms during this period. The long-term impact can be studied as a future scope of work.

### Research Methodology

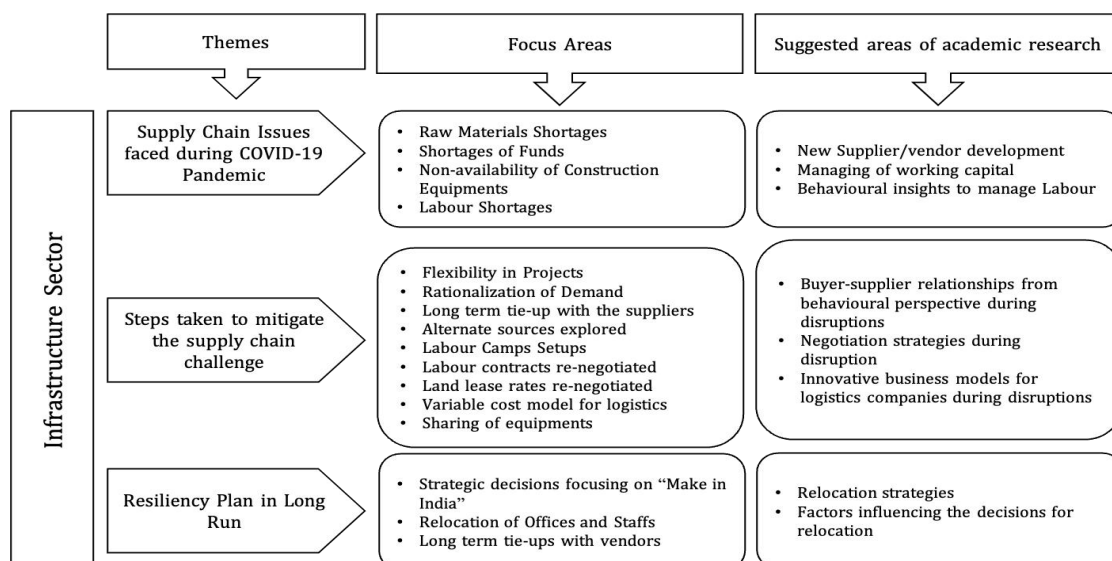
The interview is a vital data collection method which requires verbal communication between the interviewer and the subject. It is mostly used in survey, exploratory and descriptive research works (Fox, 2006). The structured interview methodology was adopted to capture the responses from the industry practitioners. The interviews were conducted through telephones and through e-mails due to restrictions due to COVID-19. The responses were also recorded through the virtual roundtable with the supply chain executives.

### Discussion and Analysis

The various professionals in different sectors of the Indian economy, one can clearly see different supply chain challenges faced by the firms. The different sectors of the economy that have been analyzed can be divided into three categories namely manufacturing sector, Infrastructure sector and Services sector. The Manufacturing sector has different industries such as Chemical industry, Food and Beverage industry, Automobile industry and pharmaceutical industry. The infrastructure sector has various industries such as Real Estate, Building Materials and Construction. Similarly, the data collected interviews from services sector industries such as Banking, Software, Broadcaster, Hospitality and Financial Services.

The following figure gives details about major issues in different sectors and different focus areas where the organizations focused to mitigate the disruption caused by COVID-19 pandemic.

the major issues faced by the firms in different sectors were identified from the interview data collected. The interview data further gave insights about the steps taken by the firms in the short-term to mitigate the immediate challenge faced due to disruption in the supply chain. Long-term plan to build resiliency in the system was also a key insight which the data provided. However, systematic academic research into these focus areas can shed light on these issues and can generate more novel ideas to build a

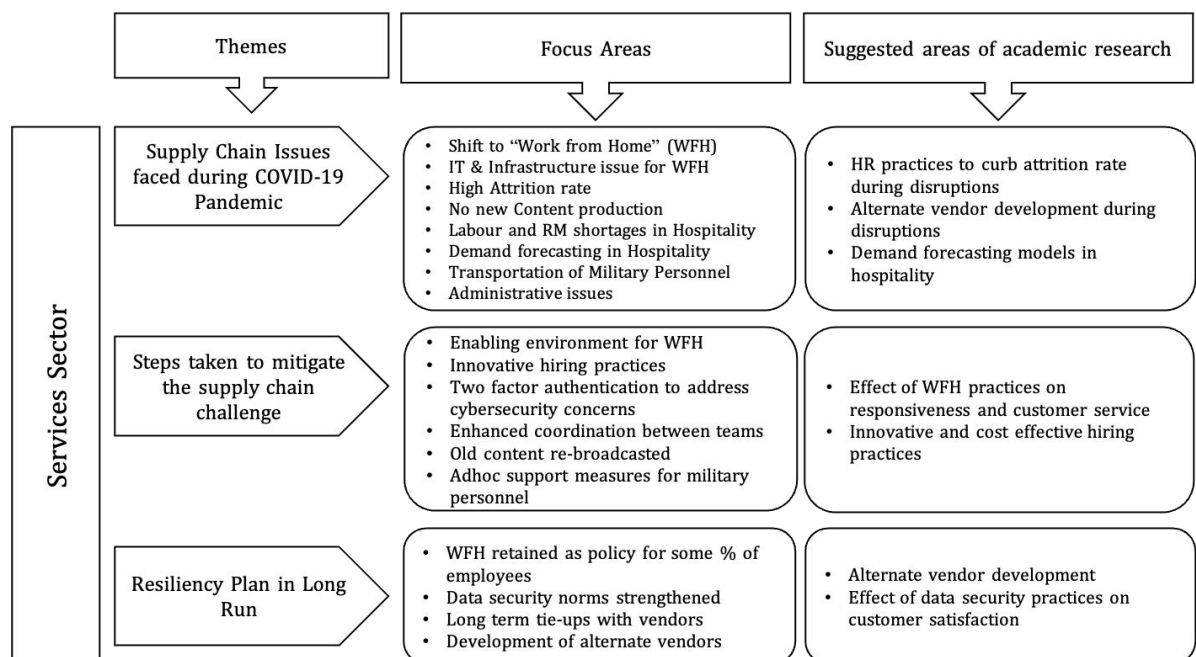




resilient supply chain for the future. Academic researchers can focus on these areas and can find useful insights through analyzing different variables in the case of a disruption. Researchers from different business disciplines such as Operations Management, Finance and Organizational Behaviors can collaborate to study the issues and provide a useful case by case solution by analyzing different scenarios. The following figures suggests some of the academic research areas that have been derived from the focus areas discussed in this paper under different themes.

### Service sector

The services sector was also impacted due to COVID-19 pandemic. The qualitative data in the form of interview captures the focus areas under the themes. The following figure depicts the suggested areas of academic research corresponding to the focus areas identified from the data.



### Conclusion

The qualitative data collected through various telephonic interviews, emails and virtual roundtable meetings with supply chain executives in different firms across sectors helped to gain useful insights. The severity of impact of COVID-19 pandemic on different value chains were evaluated using structured interview methods. The questions were designed to gain insights into the effect of COVID-19 pandemic induced disruptions, the immediate response of the firms to mitigate the challenge and the long-term plan to build resilience into the supply chains. The response to these questions were captured and analyzed to assess the major focus areas under each question/theme. These focus areas acted as a gap to be filled by the academic research. In manufacturing sector, academic research can focus on areas such as inventory policies during disruptions, different behavioral dimensions in buyer-supplier relationships during disruption of supply chains, effective HR practices during uncertain times to manage labor and improvement in forecast accuracy amidst disruption using ML algorithms. Similarly, in infrastructure sector, academic research could focus on the new vendor development practices during disruptions, innovative business models for logistics companies, managing working

capital, innovative negotiation strategies during pandemic using interdisciplinary theories and global facility location models amidst disruption of global supply chains. In services sector, the focus areas are somewhat different from the manufacturing and infrastructure sector. The academic researchers could look into the areas such as effective HR practices to curb the attrition rate in uncertainty, effect of Work from Home (WFH) practices on customer service levels, responsiveness etc., regionalization of supply chains for hospitality sector and effect of implementation of data security practices on cost, customer satisfaction etc.

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### A Case Study on The Impact of Covid 19 In Als Sector

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### Abstract

COVID19 the highly contagious infectious disease caused by Corona virus. It has shaken the world and lead to great economic depression. There is no surprise that the **Aviation, Logistics and Supply Chain Management** had been hit hardest by the Corona Virus. The Study aims to investigate the impact of Covid-19 in various sectors such as aviation, logistics and supply chain management in India. Pandemic not only affect the human being but also the business and supply chain activities. International logistics transportations also stopped during pandemic period. It also analyzes the advantages of Covid-19 in ALS sector and the job loss in Aviation sector and also the future of aviation sector after Covid-19. This paper also shows us the various measures taken by the government to prevent the spread of the disease. The resources are taken from various journals and newspapers to make know about the impact of Covid-19 and how these sectors create their resistance power to retain in this critical situation.

### Introduction

A virus named Covid-19 has been spread around the world in early 2022. It has shaken the world for more than one and half year. All the sectors had been shut down as transactions between countries become limited and the developed countries such as USA, China were announced lock down. The rate of world economic and Share market became low. The disease was decreased by taking certain



measures such as wearing mask, social distancing and hand sanitizing. And the Indian government creates more awareness about vaccination.

Nobody can debate over the fact that the world has permanently changed after the covid-19 pandemic. In addition, the value of hygiene and cleanliness, it has made us to realize many things that went unnoticed before. The value of digitalization and the work from home situation has become an aspect in our day today lives and many people became permanent as well due to Covid-19.

However, the virus has spread over the world without any boundaries and it has impacted all industries and sectors and all aspects of our lives with devastating economic and financial losses and significant uncertainties.

### **Objectives**

- To investigate the impact of Covid-19 in Aviation, Logistics and supply chain management sector.
- To focus on the economic and strategic effects in ALS sector and strategic effects during pandemic.
- To study the Acts implemented for the revival of ALS sector after Covid-19.
- To study the problems on logistics and supply chain activities during lockdown.
- To know the future of Aviation sector after pandemic.

### **Research Methodology**

This research entirely based on the secondary data and the analysis is analytical. It contains secondary sources such as articles, journals and also various websites.

According to the observation of all the sources of secondary data, we can understand the Covid-19 mostly impacts the three key global transportation segments:

- Ocean freight
- Land freight
- Air freight
- COVID also creates a great impact on the human necessities. It also affects the economic level of humans like joblessness.
- Various sectors have been greatly affected by the disease, here we took three sectors such as Aviation, Logistics and Supply chain Management to study the impact of COVID 19.

### **Corona Virus And the Aviation Sector**

It is no surprise that the Aviation Industry, Logistics and Supply Chain Management has been hit hardest by the CORONAVIRUS. One of the biggest industries that was impacted by the pandemic was the Airline Industry. Now, if you have travelled in an aero plane since March 2020, you had known much stricter the airport security has become. From taking proper precautions to using the COVID App, the rules are intact at airport. However, one can't deny that the Aviation industry has gone into losses since the lockdown came into place last year. Worldwide, this impact has affected everyone in this industry and there is still no recovery as such when it comes into international travel. In fact, 2020, was deemed as "the worst year in history for air travel demand".

### **Impact Of Covid Leads to Job Loss**

- The total job loss in Airline, Airports ground handling and Air cargo sector is around 19,200. Minister of State for Civil Aviation V.K. SINGH said Approximately 10 percent of the jobs in

Indian Aviation Sector were lost job between April 2020 and December 2021 amid the COVID19 pandemic.

- Total number of employees of domestic carriers has declined from around 74,800 as on 31 March 2020 to around 66,900 as on 31 March 2021, a decline of over 7,900 employees.
- Total number of employees in ground handling has declined by 13,300 in the down from around 38,330 as on 31 March 2020 to around 25,040 as on 31 March 2021.
- Cargo however, has seen an increase. The total number of employees in Cargo has increased from around 9,550 as on 31 March 2020 to around 9,930 as on 31 March 2021, an Increase of around 380 employees.

#### **Steps Taken by The Government to Strengthen Aviation Industry**

- The Government has taken several steps to strengthen the aviation industry in view of Safety and health of the passenger.
- Adaption of COVID protocols, use of protective gear, contact-less passenger handling process like 100% online check-in, submission of
- Self-declaration forms and self-baggage drop etc.
- Benefits under Emergency credit line guarantee scheme 3.0 extended to Civil Aviation Sector.
- AAI has taken up development of Air ports and expansion of existing airports at around Rs25,000crores in the next 4-5 years which include expansion and modification of existing terminals, new terminals, expansion or strengthening of existing runways, aprons, Airports Navigation services, Control towers, technical blocks etc.
- Government of India (GOI) has accorded “in-principle” approval for setting up of 21 Greenfield Airports across the country.
- Three Public Private Partnership (PPP) airports at Delhi, Hyderabad and Bengaluru have undertaken major expansion plan.

#### **Future Of Aviation Industry After Covid**

The passengers are maintained with great care. Many restrictions and safety Measures are taken by Airways to reduce spread. The Cost are collected for maintenance as people are very much, interested to travel, they travel through domestic Airlines to Manali, Shimla etc. unless international barricades are completely open. Nowadays the situation is becoming normal little by little. John Grant, Chief Analyst of OAG said, with Airlines still Cancelling flights and countries throwing up more barriers. India's market could plummet to as little as 25% of normal. Recently some European Countries opened their gates for Indian travelers who have been vaccinated. This step can be the beginning for all international travel to take place once again.

#### **Impact Of Covid 19 In Logistics and Supply Chain Industries**

- Generally, the impact of Covid-19 affects the logistics sector hardly.
- China is also a major consumer of global commodities and agricultural products and it also import many products and services to world territories.
- The major industries around the world, including automation, electronics, pharmaceuticals, medical equipment and supplies as well as consumer goods were affected.
- The reason for the impact in logistic sector is mainly the shortage of truck drivers and all the borders were locked during the pandemic period.

- The international supply chain activities had been in totally depressed mode because the manufactured or finished goods can't able to do the export or import activities for international trade.

### Conclusion

The aim of the paper is to establish potential condition of Aviation, Logistics and Supply Chain Management Sector during the pandemic condition. The analyses are made from various newspapers, Journals and websites to show you the impact of COVID in these sectors. The motive of the paper is to show you the comeback of these sectors and remedial measures taken by the government to reduce the spread of the disease. This paper gives a clear view how employees lost their job at the time of pandemic and also gives the futuristic view of how the aviation sector survives in the upcoming years.

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## Business Sustainability Practices Of ALS

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### Abstract

Airline Industry is the most lucrative and yet most ruthless industry to be in. India is the world's third-largest aviation market in terms of passenger throughput. IndiGo is India's largest passenger airline with a market share of 55.5% as of October 2020. It primarily operates in India's domestic air travel market as a low-cost carrier. IndiGo has a total destination count of 87 with 63 domestic destination and 24 International. It has a fleet of 284 aircraft covering 1500 daily flights.

**Keywords**

Airlines, spice jet, indigo, marketing strategy, royal airway, market share.

### Introduction

SpiceJet is an Indian low-cost airline. Earlier, it was known as Royal Airway. The company has named all its aircraft with the name of Indian spice.

It is India's second-largest airline by the number of domestic passengers carried. SpiceJet is India's largest cargo operator in terms of domestic and international cargo operations. The market share is 13.6% which is also the largest airline serving domestic destinations all across India.

### **Key strategies that make Indigo a lower cost and on-time airline company**

Short-haul & point to point route structure, a common fleet with single class seat configuration, and high employee productivity.

- Lower aircraft acquisition costs achieved through bulk purchase strategy. Last year in October 2019, it placed an order for 300 A320 Airbus aircraft, making it one of the largest aircraft orders with a single airline operator.
- Lower maintenance cost due to newer and single type aircraft strategy

SpiceJet faces tough competition from rival companies, so it has adopted a competitive pricing strategy to gain an advantage over its competitors.

It offers a mix of both low-cost tickets and decent onboard facilities to its travelers.

SpiceJet brings various schemes and discount offers to attract more passengers. Also, it offers Spice Cash to its frequent travelers which act as a reward point that they can use for getting discounts.

Every brand has its marketing style and strategy. SpiceJet also has its marketing strategy in place. The brand's marketing theme is to offer low 'everyday spicy fares and great guest services to price-conscious travelers.

Its target audiences are the premium class of train travelers, business people and corporate employees. It aims to compete with Indian Railways' AC passengers.

### **Objectives**

- 1) To develop a framework for identification categorizations and prioritization of sustainability practices
- 2) Economic environmental and social of sustainability practices relevant to airlines
- 3) Need to increase effort and focus

### **Environmental**

#### **1. Reducing Fuel Consumption**

Improving fuel efficiency is arguably a good way to reduce greenhouse gases and some airlines are doing this by reducing weight on the airline. Reducing single-use plastics and adopting biofuels are two ways to reduce fuel consumption on current aircrafts.

#### **2. Biofuels**

**United Airlines** made history in June 2019 by operating the most eco-friendly flight. According to a United press release, they accomplished this by "using a 30/70 blend of low-carbon, sustainable aviation fuel provided by Boston-based World Energy, and traditional jet fuel." Biofuels are considered an effective sustainability practice. However, at the moment, they're more expensive than traditional jet fuel.

#### **3. Eliminating Single-Use Plastics**

Some airlines are looking to changes in consumer's buying habits and making adjustments such as dropping duty-free sales inflight. This reduces the need to carry extra inventory which lowers fuel consumption and speaks to the modern shopping habits of travelers.

#### **4. Look Local for Food Service**

Providing locally-sourced and seasonal foods reduces the carbon footprint of food transportation. While most lettuce that finds its way on airlines is shipped from California or Arizona to its departure airport, Singapore Airlines introduced a “farm-to-plane” concept on the world’s longest flight. A 40,000 square foot **vertical** urban farm, just 5 miles away in Newark, grows lettuce and baby greens for the 19-hour flight.

## 6. Carbon Offsets

Protecting old-growth forests and planting new trees helps protect the environment. So does investing in projects like wind farms that focus on renewable energy sources. Some airlines offer options for passengers to purchase carbon offsets. United Airlines, for example, has partnered with Conservation International to advocate for nature-based solutions to climate change.

## 7. Educate Passengers

Not all passengers are as aware of their environmental options as others. Flying economy rather than business class and packing lightly are two ways to directly contribute to sustainability in the airline industry because a lighter plane usually means less fuel consumption.

### Social

Social sustainability is about identifying and managing business impacts, both positive and negative, on people. The quality of a company's relationships and engagement with its stakeholders is critical. In corporations, social sustainability performance issues include human rights, fair labor practices, living conditions, health, safety, wellness, diversity, equity, work-life balance, empowerment, community engagement, philanthropy, volunteerism, and more. Though social impact, or social sustainability, issues are not easily quantifiable or measurable, they are easier to identify. Adrian Henriques, Professor of Accountability and CSR at Middlesex University and author of ‘Corporate Impact – Measuring and Managing your Social Footprint,’ states, “Social impact includes anything that affects company-stakeholder relationships: from how much and how reliably suppliers are paid, to how a product affects lives. From how small shareholders may be treated to the impact of alcohol on health and communities.” Dimensions of social sustainability equity, diversity, social cohesion , quality life .

## Solutions For Enhancement of Business Sustainability Practices in Als

One of the main cultural barriers across society is the focus on short-term key performance indicators (KPIs) and budgets. A sustainable business needs to encourage all those it works with to look at, and reward, long-term results. This idea is perhaps most apparent in the construction industry, where the perceived higher cost often blocks the creation of greener buildings. “When looking at costs across the lifetime of a building, it really makes economic sense to build a green building,” says Elaine Trimble, urban infrastructure economist at Siemens. Changing organizational structures or creating roles, such as sustainability managers, might only act as a bolt-on, when a complete change in business culture and managerial priorities is needed. “We have tried to embed cultural change and responsibility at all levels of decision making,” says Clothier, adding that sustainable thinking “works best when it is fully part of the business’s strategic direction”. Many sustainable businesses have taken risks by investing in systems and technologies that are not yet mainstream. While it is easier for new businesses to set up in a sector with more developed systems working and paying for themselves, it is much tougher for early adopters to raise the finance for relatively unproven technology.

### Conclusion



All businesses, small or large, new or mature, can implement aspects of sustainability reporting into their organization to achieve improved operating results while minimizing negative societal impacts and emphasizing positive societal impacts. A final conclusion is that in order to achieve a more satisfactory relationship between society and its environment, timely provision should be made for the changes that human activities and competition over use of resources may bring about in order to minimize potential conflicts. It makes the resources available for use for the future generations.

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## **Financial Health - A Prerequisite for A Nation.**

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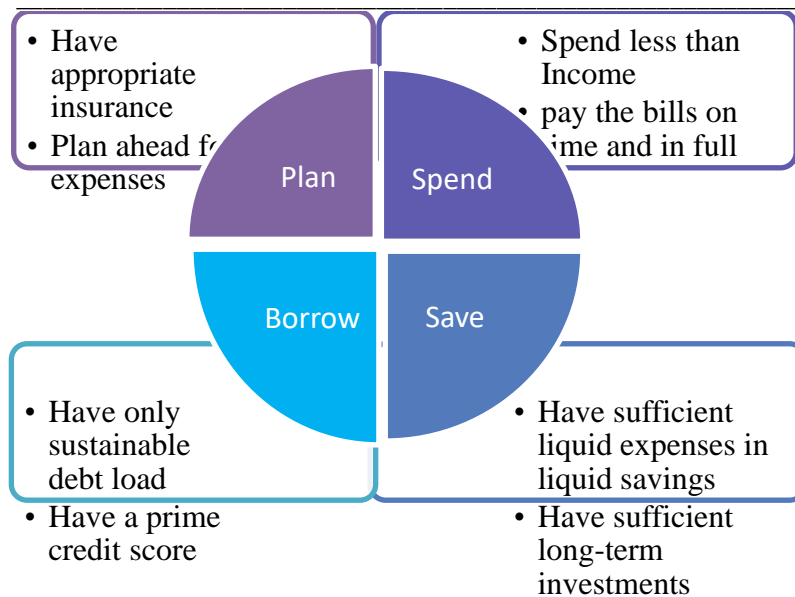
### **Abstract**

Financial well-being or health is a forthcoming concept that helps the policymakers of the financial sector who are anxious about how financial services influence their customers. Developed nations have a well-time-honored and established policy regarding financial health. The developed nations have achieved amazing drops in mortality and morbidity over the past three decades. But the services provided to the customers are meager and dispersed. According to a study, the total disbursements of developing countries, including public and private spending is only 5% of that of developed countries. This money spent is inadequate to meet the crucial health needs. Secondary data is collected from the website of the world bank for the study and a conclusion is reached that financial wellbeing should be given priority in the future by the government.

### **Introduction**

Financial health is the competence to maintain a balance against everchanging disorders in the environment and transmits to every person related to it. Financial health is vivacious as it unswervingly influences other well-being dimensions including the physical and mental health of the people, livelihood, and the social relationships between human beings. In the case of a nation, it is very important worthy to bequeath priority among various other imperative commitments for its advancement. It replicates the proficiency in making disbursements as well as determining the best way for investments, in such a way as to convalesce national wealth. There is conjectural nexus between financial health and financial distress as the degeneration of financial health paves the way to the financial distress of a nation. It is imperative to compute and recuperate the financial health of human beings as the pandemic had moved the well-being of the people and put the world at stake. The requisite for financial health is inestimable in the present global scenario as the central banks, governments, and financial service providers have primacy in this issue and have augmented exertions on financial literacy and financial behavior with the conviction that offering these elucidations is very judicious in accomplishing good financial health. Nevertheless, contemporary evidence from various populaces of the world advocates that higher levels of earnings and financial literacy do not at all times decipher financial health. According to Javaid and Javid (2018), financial health prediction is one of the most debated topics in financial literature. They opined that financial performance is governed by financial ratios with the help of prediction models to determine financial health.





**Diagram-1 Financial Health Measures**

The financial vulnerability triggered by the pandemic and the cataclysmic situation which followed was one of the reasons for the global recession we can see nowadays, particularly in developing countries. The pandemic has revealed the debility of the economic and social systems of developing nations. At present, the economically vulnerable people are not confined to elderly, low-income, or micro businesspersons, but comprise everyone striving to manage financially with the catastrophes. In the case of a nation, it is very important to evaluate and keep track of the financial health of humans. Consequently, financial policies, programs, regulations, and services should be designed to make sure worthy financial outcomes for individuals and households. These comprise financial literacy, financial inclusion strategies, financial consumer protection regulations, social safety mechanisms, wealth creation, livelihood support programs, and financial products and services. The public, as well as the private market performers, should realize and demonstrate their involvement in sustainable development goals (SDGs). But, when compared to highly developed countries, the struggles of low and middle-income countries are limited, even though the latter needs the most. Besides, a common and globally accepted financial health measurement methodology is yet to shape up.

In this study, secondary data showing the percentage of GDP growth and the percentage of GNI per capita for four years from the website of the world bank is taken. Using the graphical method, the financial health of some selected countries like India, Japan, Nepal, the USA, and Israel are studied and the conclusion is reached that financial health should be given much significance.

### Review of Literature

The vulnerability of an emerging country to the risk factors associated with financial globalization is dependent on the quality of macroeconomic policies and domestic governance. an overvalued exchange rate and overextended domestic lending boom often act as a harbinger of a currency crisis in a nation. In addendum, lack of transparency is correlated with herding behaviors to a greater extent by international investors, which can knock off-balance of the financial markets of a developing nation. A high degree of corruption may disturb the composition of a country's capital inflows, thereby creating a more vulnerable situation to the

### Research Gap

Nonetheless, financial health is very important for the well-being of a nation which has been proved by various researchers in the past, a vast majority of these studies are focused on western scenarios but with very insufficient research in Indian milieus. Researches have to be steered in the direction of the study of the Indian scenario about the significance of the financial health of a nation. This study highlights the prominence of financial health in the context of our nation.

### Scope of the study

The study of financial health will be very expedient for investors, policymakers, and corporates in the arena of finance. The study has made an overwhelming contribution to the analysis of the need for financial health in India. The investigation of finding the benefits of financial health measures and their proper implementation will facilitate the stakeholders who are interested in this field to a greater extent.

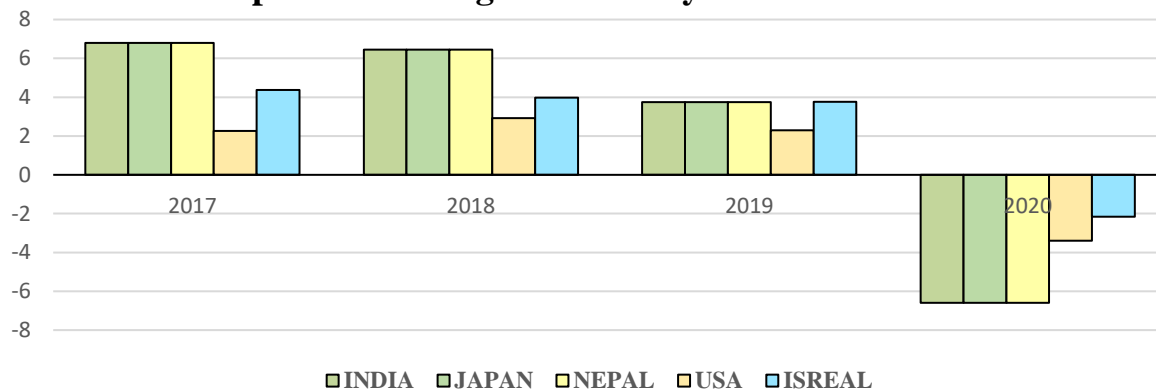
### Statement of the problem

Investors are always at a risk of losing in case of an unexpected crash in stock markets, which makes them reluctant to invest in Indian stock markets, even the times may change causing gargantuan wins from the stock markets. The reason for the sluggish behaviors of certain investors even though there is a pronounced chance of returns is a setback for economic development due to the notion that India is lacking in financial health. A right-intuited study will support prospective investors to formulate a pertinent decision to make an investment decision.

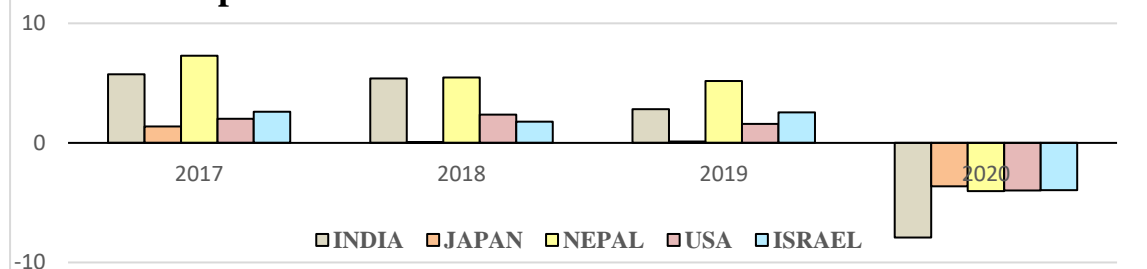
### Objects of the Study

1. To study the financial health of a few countries like India, Japan, Nepal, the USA, and Israel.
2. To find out whether the measures for supporting financial health are proper in India

**Graph -1 GDP % growth for 4 years**



**Graph -2 GNI %PER CAPITA GROWTH for 4 Years**



### Conclusion

From the study made we can conclude that in the countries selected for the study there was a declining trend from 2017 to 2019 and negative growth in the case of the percentage of GDP growth as well as the percentage of GNI per capita in 2020. The reason for the negative growth may be due to the pandemic which affected the entire globe. It can be said that the government should take steps to improve the financial health of our country as any further decline in the future in the post-pandemic period may affect the economy of our country greatly causing it not to come up to the front like developed countries. Thus, financial health is a prerequisite for a nation in a global context.

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## A Study on Awareness about LIC's Modes of Payment among all types of workers in Mettupalayam"

*Dr. S. Thulasimani*

### Abstract

In this Study an extensive study was conducted to know the awareness of various types of workers about the modes of payment of premium in LIC. major problem of the people is to make payment of premium. When they have money in hand, they are in trouble to find the correct mode to pay their premiums. But now there are many easy, quick and accessible modes available to make payments. The questions is weather people are aware about the modes. So, the research was conducted in Mettupalayam. The study was conducted among 200 people, from all types of workers. The collected data were analyzed using statistical tools. The results were given, for which suitable suggestions were also underlined.

### Alternate Channels of Payments

#### Online Payments

Online Premium Payment is LICs initiative to provide on demand premium collection service within a few clicks! It provides for real-time payment of renewal premium dues through the LIC portal. Premium payment facility is available to both registered as well as non-registered customers by using PAY DIRECT option on LICs website - [www.licindia.in](http://www.licindia.in).

Relevant Conditions:

1. Premium can be collected for Ordinary In force and Spot Revival allowed policies under all Plans and modes (YLY, HLY, QLY & MLY)
2. Premium for policies under Salary Savings Scheme (SSS) mode.
3. Premium for NACH mode cannot be paid online.
4. Acceptance of premium can be done up to 30 days before.
5. It is advisable to refrain from paying premium through this channel if the policies are already registered under BILL PAY option of electronic 6. Renewal Premium can be collected for ULIP & HEALTH Insurance Policies also.

#### **Facility of Premium Payment in Advance**

1. Policyholder can deposit the premium in advance, subject to maximum dues allowed i.e. up to the end of financial year. E.g. Premium falling due up to 31st March can be collected in current Financial Year.
2. Premium due in Next financial year can also be deposited in advance for a maximum period of three months in advance of the due date of the premium.

Before clicking the “Check & Pay” button, policyholder must read the instructions displayed on the screen. “Premium should be paid on the policy owned by you only. A receipt would be mailed to your registered email-id. If Premium Receipt is not Generated /Error Page Displayed: If the premium amount is debited from your bank account but error page displayed, a receipt will be sent to your email-id in three working days after receiving the confirmation from your bank.

#### **Debit Cards and Credit Cards**

The LIC premiums can be paid using debit and Credit cards.

#### **Benefits**

- This is a simple process with one time enrollment of the policies.
- Premium can be paid anytime and anywhere.
- Valid premium receipt is received instantly.
- It is also a secure arrangement, as the policy data is not shared
- There are no charges for payments made through Debit Card / Net-banking / UPI.

#### **Paytm/ Phone Pe/ Google Pay/ Amazon Pay/ Mobic wick app.**

Renewal premium can be paid through these App by clicking on the LIC logo. While initiating the payment email id will be asked from the user. The payment receipt will be sent to this mail id only. Also, same will be available for download in apps itself like in “Paytm - My Order”, “PhonePe - History”, “Google Pay - All Payment activity”, “Amazon Pay – Your orders” No other receipt will be issued by LIC. Premium position will be updated on real time basis.

#### **Payment of LIC premium can be made on the website/ applications of banks as under:**

The customer will open the website of his / her bank in the browser OR invoke the Banking App on his / her mobile device.

1. SELECT ‘Pay Bills ‘
2. Choose “insurance” as the category of Biller
3. Click on “Insurance” and view the list of insurance companies in dropdown menu
4. Click on ‘Life Insurance corporation Of India”

5. Proceed by keying in the policy number, name, email address, mobile number. The premium due dates, total amount due (with GST, late fee if any) is fetched from the LIC customer portal and displayed to the customer.
6. The online payment happens from the net banking enabled account of the customer instantly on clicking "submit".
7. There are NO charges for the transaction.
8. E receipt is emailed to the email address of the customer keyed in at the time of initiating the transaction in the display screen.
9. There is an option to download the e receipt as a pdf onto the customer's device.

### **Electronic Clearing Service**

ECS facility for payment of premium was started in L.I.C. since March 2004. This is a facility by which premium is deducted by bank.

LIC of India has migrated all its existing policies registered under the The National Payments Corporation of India (NPCI) has implemented an electronic payment service termed as National Automated Clearing House (NACH) is a funds clearing platform set up by NPCI similar to the existing ECS of RBI.

Conditions to avail this facility:

1. NACH facility can be availed at the time of inception of the policy.
2. In NACH (MLY) mode, 5% extra premium charged under normal Monthly
3. No receipts will be printed and dispatched for NACH (MLY) mode policies.
4. NACH mode of payment can be opted for all Inforce ULIP.
5. NACH mode is not allowed for E-term Policies.
6. To opt for NACH facility the next premium must be due at least after 1 month from the date of exercising the option of NACH facility.
7. Arrears of premiums cannot be collected through NACH.
8. Under the policies registered under NACH mode, premium cannot be paid through any other payment channel.
9. If NACH debit to customer's bank is dishonored, deduction will automatically stop for the further dues until the premiums that have fallen due are paid at LIC Branch / premium Point/LIC.
10. Debit dates allowed are 7th, 15th, 22nd and 28th of the month.

### **Premium Collection Through Merchants**

Selected individuals (agents, development officers, retired employees) are authorized by LIC to collect premium in cash and cheque from policyholders at Premium Points, Life Plus centers, Life Points and Bima Connect offices

### **Premium Collection Through Authorized Collection Centers**

Many Service Providers, which include Government & Private Ltd. companies, are franchised to collect premium for LIC policies. Signed receipt issued by the collection centers is a valid receipt and no other receipt will be issued by LIC. Premium position will be updated on real time basis.

Following Banks are authorized to collect premium for LIC policies:

1. Axis Bank



2. City Union Bank
3. IDBI

Signed receipt issued by the Bank is a valid receipt and no other receipt will be issued by LIC. Premium position will be updated on real time basis.

Relevant Conditions for Premium Collection

1. Premium can be paid in any Branch of Extension Counter of the Bank.
  2. Premium can be collected only in CASH (up to Rs.50,000/- only) or CHEQUE drawn on that bank.
- However, in IDBI Bank,

### Conclusion

The data collected was analyzed only using simple percentage. And found more than 80 percent of the respondents were not aware of alternate modes of payment.

So, It was found the need of creating awareness among the general public about all the channels of the payment of premium.

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## Social Entrepreneurship Intention Among College Students

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*Ms. Prashitha G,*

*Ms. Oviya*

### Abstract

Social entrepreneurs are seen as having the ability to solve social and economic problems where it is the process of planning and executing a mission that has a social value and this can be achieved through continuous learning and the adoption of sustainable innovation. The innovative usage of available resources in a way to pursue all the opportunities so as to bring out a social change and/or social needs is the process of Social Entrepreneurship (Mair and Marti, 2006).an entrepreneur recognizes social problems and uses entrepreneurial principles to bring about change and society by creating and managing a venture.

### Introduction

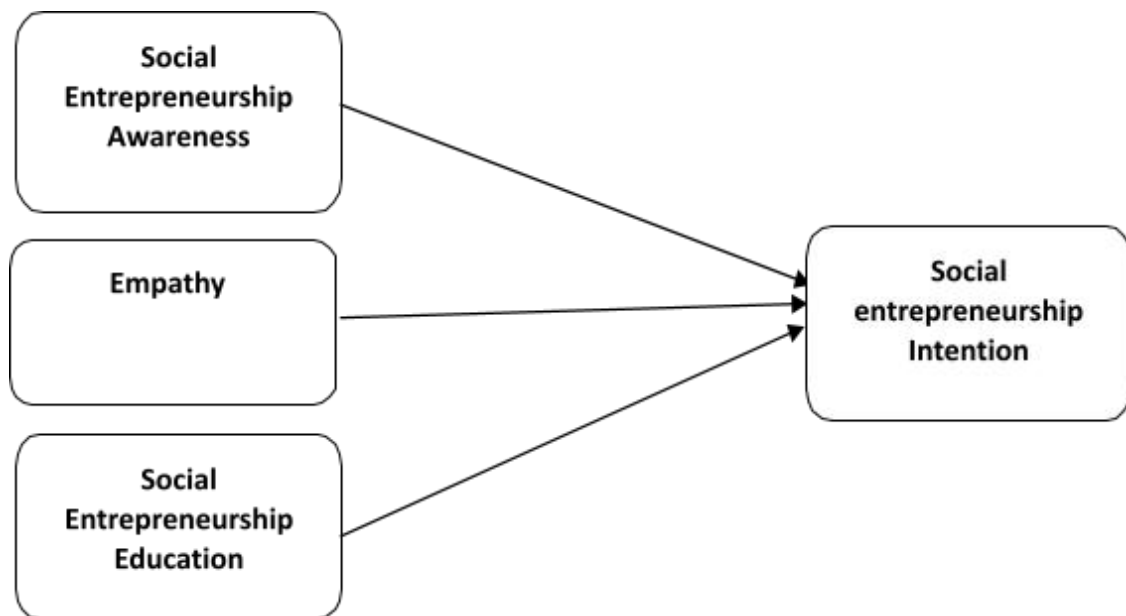
These entrepreneurs do not expect profit as a return and their goal is to make the world a better place to live (Verma and Vohra, 2014). They focus on the social issues which are vast and diverse, it is not particular to a community or a region and sometimes they may take up an issue which is having a global presence such as poverty, inadequate education facility, health problems, environmental issues, unemployment, etc., businesses, and non-profits may not be able to solve problems by themselves. Therefore, through collaboration between these sectors, many social institutions can be created to create social values and development in countries, especially among emerging economies. Therefore, it is time to study what motivates undergraduate students to develop social entrepreneurship goals. It is the process of planning and executing a mission that has a social value and this can be achieved by continuous learning and adaptation of new strategies which are sustainable. The innovative usage of available resources in a way to pursue all the opportunities so as to bring out a social change and/or social needs is the process of social marketing training (Mair and Marti, 2006).

### Objectives of the Study

To access the social entrepreneurship Intention, Social Entrepreneurship Awareness, Empathy, Social Entrepreneurship Education.

To identify the most influential factors on social entrepreneurship intention among college students

### Theoretical Model



### Methodology

Questionnaire used for the study

A structured questionnaire was used to collect the responses for the study. The questionnaire used for the study was adopted from studies by Archana R V, Kai Hockerts (2019). The questionnaire had two sections. The first section had questions pertaining to the demographic profile of the respondents and Section 2 had items to measure the various constructs. The items in Section 2 were measured on a 5-point Likert scale where 5 meant 'Strongly Agree' and 1 meant 'Strongly Disagree'. For instance, the respondents were asked the consumer perception towards electric vehicles.

Table 1 displays the reliability scores (Cronbach's Alpha) of the various constructs. All constructs reported a good reliability score.

Reliability Analysis

#### Interpretation:1

It can be interpreted from the above table that the mean values for Empathy (E), Social Entrepreneurship Education (SEE), Social Entrepreneurship Awareness (SEA) are 4.0052, 4.0368 and 3.9752 respectively on a 5-point Likert Scale. The high scores indicate that the respondents' empathy level is high, social entrepreneurship education are likely to be important and social entrepreneurship awareness are equally important. mean value as most of our respondents were females and it is psychologically acceptable that women are more empathetic than men. The statement "I feel compassion for socially discriminative people" has the highest mean value and goes well with the psychological factor of empathy.

#### Interpretation:2

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Among the variables considered, highest correlation exists between Social Entrepreneurship Awareness and Social Entrepreneurship Intention ( $r = 0.853$ ,  $p < 0.000$ ), followed by association

MALE						FEMALE				
Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error				B	Std. Error			
(Constant)	1.182	.431		2.745	.011	-.464	.275		-1.685	.095
Social entrepreneurship awareness	.308	.172	.390	1.788	.086	1.214	.112	.954	10.795	.000
Empathy	.188	.158	.259	1.190	.245	-.166	.129	-.125	-1.281	.203
Social entrepreneurship education	.239	.142	.268	.105	.105	.025	.092	.023	.276	.783
$R^2 = .709$ ; Adj. $R^2 = .674$ F = 20.289; Sig. = 0.000						$R^2 = .762$ ; Adj. $R^2 = .754$ F = 102.359; Sig. = 0.000				

between Empathy and Social Entrepreneurship Intention ( $r = 0.670$ ,  $p < 0.000$ ) and followed by an association between Social Entrepreneurship Education and Social Entrepreneurship Education ( $r = 0.656$ ,  $p < 0.000$ ). It could be interpreted that there is a positive correlation between all the variables namely Social Entrepreneurship Intention, Social Entrepreneurship Awareness, Empathy and Social Entrepreneurship Education which is significant at 5% level.

Regression analysis

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.336	.232		-1.451	.149
Social Entrepreneurship Awareness	1.055	.057	.853	18.442	.000
<b>R square=0.728; Adjusted R square= 0.726</b>					

### Interpretation:3

From the above table it is inferred that the R square value is 0.728 and Adjusted R Square value is 0.726. This implies that Social Entrepreneurship Awareness predict 72.6% variance in Social Entrepreneurship Intention of the respondents.

### Regression for Subgroups

From this table it can be inferred that in the gender category the sub category of female has higher r square and adjusted r square values when compared to the sub category of male. The r square value of female is 0.762 which is higher than the r square value of male which is 0.709. In the same way, the adjusted r square value of female is 0.754 which is higher than the adjusted r square value of male

which is 0.674. This implies that females tend to have more social entrepreneurship intention than men.

There is a significant difference in the mean perception of respondents of different age group with regards to social entrepreneurship intention, social entrepreneurship awareness, and social entrepreneurship education.

A Hence to find the respondent of which educational level vary in their perception with respect to others, Post hoc analysis (Tukey's B) is performed. The post hoc Tukey's b test table present four distinct homogenous subsets indicate that there is significant difference between educational levels first year, second year, third year and fourth year. Educational Levels first year and third year - Post Hoc Analysis – Educational Level and Social Entrepreneurship Intention.

### Conclusion

In sum, the perception of feasibility of setting a social enterprise does not directly affect the social entrepreneurial intention per se, rather, when perceived feasibility is high, the perception of desirability will be greater, which in turn, leads to more positive social entrepreneurial intention. This finding implies that the university should focus on activities to cultivate the desirability perception among undergraduates in order to promote more social entrepreneurial start-ups. Meanwhile, perceived feasibility of social enterprise is found to mediate the relationship between empathy and perceived desirability. The finding implies that it could be more difficult to foster empathy among undergraduates, it is more practical to expose students to the feasibility of social enterprises in the country, which will indirectly enhance the social entrepreneurial intention. As such, social entrepreneurship courses are an impetus to universities and institutions aiming to stimulate the development of social entrepreneurship in the country.

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## Logistics And Operations Management

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### Abstract

Logistics and Operations Management are two such different departments. Logistics or Logistics management is the part of supply chain management (SCM). It deals primarily with the planning and transportation of goods from one location to another as demand requires. It can be said that the operations department oversees the entire production from the beginning which includes procurement of raw materials, storage and transportation, the utilization of the said resources, as well as people, equipment, technology, information, and other resources.

### Introduction

Logistics deals primarily with the planning and transportation of goods from one location to another as demand requires. Operations Management deals with the designing and controlling the process of production and business operations dealing with goods or services. Logistics is a segment under operations management.

### Logistics Management

Logistics deals primarily with the planning and transportation of goods from one location to another as demand requires. Logistics management, as name suggests, is a part of supply chain management that mainly focuses on management, movement and storage of materials and goods as well as providing satisfaction to customers. In business, there are many different segments and departments, all of which have to work in unison for the business to succeed.

### Operational Management

Operational management, as name suggests, is a management that mainly focuses production details and operations to create and increase efficiency within organization as well as focuses in converting material and labor into goods and services. Its singular goal is to utilize all resources of the company to maximize production, and hence maximize profit. Basically, its primary function is to get the maximum production results from whatever resources are available to the company.

### Responsibilities Of Operational Management

#### Planning

- Capacity, utilization.
- Location
- Choosing products or services
- Make or buy
- Layout
- Projects
- Scheduling
- Market share
- Plan for risk reduction
- Forecasting

#### Controlling

- Inventory
- Quality



- Cost

#### Organization

- Degrees of standardization
- Subcontracting
- Process selection

#### Staffing

- Hiring or layoff
- Use of overtime
- Incentive plans
- Job assignments

### Scope Of Operation Management

Operation management includes:

- Forecasting
- Capacity planning
- Scheduling
- Managing inventories
- Assuring quality
- Motivating employees
- Deciding where to locate facilities.

### Elements Of Logistics Management

Logistics management involves numerous elements, including;

- Selecting appropriate vendors with the ability to provide transportation facilities.
- Choosing the most effecting routes for transportation.
- Discovering the most competent delivery method.
- Using software and IT resources to proficiently handle related processes.

### Comparison between Logistics and Operations Management

	<b>Logistics</b>	<b>Operations Management</b>
Definition (Business Dictionary)	Planning, execution, and control of the procurement, movement, and stationing of personnel, material, and other resources to achieve the objectives of a campaign, plan, project, or strategy. It may be defined as the 'management of inventory in motion and at rest.'	The design, execution, and control of operations that convert resources into desired goods and services, and implement a company's business strategy.

Description	Logistics is the process of planning, implementing, and controlling procedures for the efficient and effective transportation and storage of goods, including services and related information, from the point of origin to the point of consumption.	Operations Management is the administration of business practices to create the highest level of efficiency possible within an organization. It is concerned with converting materials and labor into goods and services as efficiently as possible to maximize the profit of an organization.
Part of	Supply Chain Management or Operations Management	Business Management
Entails	Anything and everything to do with transporting goods and services	Maximizing production by procuring and utilizing available resources
Functions	Inventory Transportation Warehousing	Start to End Production Procurement and Management of Resources, including raw materials, people, equipment, technology, information, and other resources.

The functions of a company or organization can be divided into three broad categories: marketing, finance, and operations. Everything that doesn't fall into marketing or finance can be placed under operations. Operations is basically what the company does, the marketing and finance is there so that the company can keep conduction operations. So, in short it can be said that operations management takes care of all the operations (i.e., tasks) that take place in the company or organization. Whereas, logistics is just a segment under operations as it deals with storage and transportation of materials, resources, work-in-progress, and finished goods. The confusion often occurs as supply chain management, which includes the aspect of logistic

s, and operations management are interrelated and dependent on each other. In fact, in a number of organizations, supply chain management is a department under Operations Management. Therefore, the logistics department can be part of the supply chain management department, or the entire SCM can be under operations management. Its singular goal is to utilize all resources of the company to maximize production, and hence maximize profit.

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## Green Supply Chain Management Trends and Future Challenges

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### Abstract

The study analyses to present the insights along with the classifications of the literatures based on content analyses, which comprises of conceptual development, drivers and barriers, collaboration with supply chain partners, mathematical and other optimization models, and assessment of green supply chain management practices and performance. The study finds that research on drivers or barriers analysis of green supply chain management reveals a declining trend while there is a growing trend of applying mathematical optimization models for enhancing decision making in pursuit of environmental performance. Moreover, the study finds a consistent growth in the evaluation of green supply chain management practices and performance. Though, the concept of green supply chain management started gaining popularity among academicians from the beginning of the 20<sup>th</sup> century, this study finds a sharp growth of publications on the topic after 2010 until now. This study identifies influential authors, top journals, top contributing countries, top contributing institutions and contribution by disciplines. This study presents a comprehensive but straightforward conceptual model of green supply chain management. The findings and future research directions of the study offers a new avenue for further exploration and contribution to this discipline.

### Introduction

The rise of global warming and changing biodiversity has brought the world's sustainability towards imminent danger. People from different areas including researchers, academicians, practitioners, and scientists got together to propose ways to maintain environmental sustainability. It is often claimed that unplanned and irresponsible actions by industries are potential threats to sustainability. Consequently, establishing sustainable industries is one of the main goals of contemporary organizations. To achieve greater sustainable objectives, organizations need to play a vital role and need to be concerned about the external environment, which is often referred to as 'going green' mission. The 'green' concept is referred to as 'doing actions while integrating environmental or

ecological concern.' The supply chain is an important branch of operations management, and it has a significant impact on the environment including emissions, pollutions, the health hazard of community, etc. Organizations are now trying to minimize environmental impact by integrating environmental concern into their supply chain operations. The integration of environmental concerns into supply chain management practices is referred to as 'green supply chain management' (GSCM) (Sarkis, 2012). GSCM has been established as an important discipline in the academic world and a separate branch of sustainability. The research on GSCM has been proliferating for the last two decades and still needs further insights for future studies.

As the Indian economy turns into brand new areas, the country's commercial activity prepares for huge growth, fueling worries of unfavorable ecological repercussions. (Sahoo & Nayak, 2007) The country's commercial growth can't be jeopardized at any expense, and this increases genuine worries about environmental protection during all succeeding industrial development. GSCM, nevertheless, provides a ray of light on the front of building environmentally friendly supply chains throughout industrial sectors, as opposed to the prominent concept that financial growth is connected to ecological deterioration. (Srivastava, 2007) As the world's population continues to increase, our planet's resources are actually progressively stressed out. (Haiyun et al., 2021) The quality of our lifestyles will certainly quickly decrease unless we find methodical means to maintain our resources as well as surrounding habitats, and we might get to a point of no return. One of the means is GSCM, which is ecofriendly administration of supply chain procedures from start to finish. Eco-efficiency is actually included in value chains, in addition it links between sourcing, production, as well as shipment procedures, in addition to externalities that affect those tasks. The proceeding expedition of these factors, despite research topic or even methodology, ought to assist the GSCM research study area mature as well as revitalize. (Negri et al., 2021) Sustainability styles are integrated into standard supply chain administration with green supply chain techniques. (Tseng et al., 2022) The objective is to help companies in decreasing carbon dioxide discharges and also waste while enhancing revenues. Production and buying, with circulation, warehousing, and transport, all of which have chances for green enhancements. The fundamentals of achieving a greener supply chain, why it matters, and exactly how we can easily help drive change is drafted within this particular paper. In response to an immediate need, green supply chain techniques are finding their way into the general public consciousness. Each year, quantifiable individual need and task surpass the natural ecosystem's regenerative ability. "Environmental overshoot" is the phrase for this circumstance. Overshoot happened on August 22, 2020, for instance Individual worked in an ecological deficit for the remainder of the year, diminishing resources required for the future. Searching for sustainable remedies has acquired grip since most people as well as companies recognize the risks of surpassing nature's capability to sustain its own inhabitants. Recently, this aspiration has led to a multitude of fresh advancements, especially in supply chains. ( Haiyun, C., Zhixiong, H., Yüksel, S., & Dinçer, H. (2021). The following supply chain trends as well as techniques are helping companies in being actually more ecologically mindful as well as promoting a much more sustainable future for our world:

**Airfreight Decrease:** When it concerns rapidly transferring goods, air delivery is actually rather effective. Sadly, it is ineffective in regards to energy. More businesses are recognizing the advantages of utilizing air freight to satisfy just temporary needs, while depending on ocean freight and rail

transportation to satisfy long-lasting demands. Selecting the appropriate freight as well as transport blend will certainly assist in satisfy client need while decreasing our ecological effect.

**Transportation Infrastructure Investment:** Enhancements to ports, railways, and roadways are enabling more effective transport, especially in broadening markets like Southeast Asia. Consequently, carbon dioxide discharges have reduced. Building more charging stations for big electrical vehicles is actually the following stage. The West Coastline Electric Highway, a system of fast-charging stations for electrical automobiles that operates with California, Oregon, and Washington, is a great location to begin in North united states. Nevertheless, experts caution that so as to stay up to date with the need for green trucks, this infrastructure should establish at a quicker rate worldwide.

**3D Printing:** 3D printing is searching for new uses in range of industries daily, coming from aerospace to medical gadget manufacturing. (Dua et al., 2021) 3D printing is more energy efficient as well as affordable compared to conventional manufacturing devices and techniques. 3D printers are accurate and create hardly any waste. They make it feasible for companies to create items on-demand, preventing the danger of overflow.

**Circular Supply Chains:** The objective of circular supply chains is to recuperate as well as recycle waste resources so as to transform all of them into marketable products. This technique can take a variety of forms, varying c from remodelling aged products for resale, as Apple finishes with its own iPhones, to reusing aged products to produce new items. Embracing the circular economy method, obviously decreases waste and keeps important products away from garbage dumps. It can likewise be lucrative for companies.

**Carbon Dioxide Emissions Trading:** Carbon trading is the procedure of trading carbon credits in between nations to decrease CO<sub>2</sub> discharges. Each nation is actually restricted in how much CO<sub>2</sub> it can produce. Countries with greater carbon dioxide discharges can then purchase carbon dioxide credits from nations with reduced carbon discharges, enabling them to produce more CO<sub>2</sub>. Private companies can likewise take part in trade. The concept responsible for this method is that utilizing fossil fuels has lots of hidden costs, varying from ecological damages to enhanced health care which sets back lives because of bad sky-high top premium. Placing a financial value on the right to produce carbon offers a monetary reward for nations as well as companies to reduce their discharges. As a matter of fact, the variety of carbon trading programs worldwide is actually enhancing.

Prominent instances of sustainable green supply chain efforts consist of proactively aiming to change to biofuels, integrating reused products into industrial procedures, and also decreasing energy consumption. Nevertheless, certainly not all of green supply chain methods are actually clearly sustainable. Better work methods and reasonable pay for employees, for instance, result in a greater general quality of life. However, these methods have no direct environmental effect.

SSCM helps companies in responding to difficult problems like where they source their raw materials, exactly how employees are actually addressed, and whether they are producing jobs for their community. Business are seeking to build topper forming supply chains along with the objective of making use of them to develop a much better, more ecofriendly, and eventually more profitable company. A company's sustainability efficiency is actually enhanced by utilizing GSCM techniques in its supply chain activities. SSCM refers to the higher scope of procedures, of which GSCM is a subset. A green supply chain is one of the three legs of a sustainable supply chain, which are the environmental, social, and economic legs. GSCM and SSCM procedures are complementary to each



other, leading to a much better, much more secure, and more environmentally accountable organization.

### Conclusion

The goal of this particular report is to offer a summary in order to determine present patterns in green supply chain management and to compare sustainable and green supply chain management. It was found that GSCM is actually mostly utilized in industrial sectors and few in construction. Some developing nations like Singapore, India, China, Hong Kong, Malaysia, and Southern Africa, have evaluated GSCM. GSCM is the procedure of transforming eco-friendly inputs into outcomes that could be recovered and re-used at the end of the life cycle, leading to a sustainable supply chain. Materials are created from natural resources; therefore they should be eco-friendly. Recently, sustainable supply chain management (SSCM) has obtained a great deal of interest and has actually expanded in popularity as a scholastic and research study discipline. Business organizations today deal with various problems, consisting of quick environment change, increased public enthusiasm in green company perspectives (Green Supply Chain Management, Green Computing, Logistics, and so on), and guaranteeing ecological sustainability. Creating everything based upon ecological concerns is one of the accurate needs of the present. Sustainable issues are typically environmentally friendly. Therefore, using this paper we tried to address the subject of sustainability in the area of supply chain management through showing exactly how several point of views may be articulated.

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### Supply chain management in Agriculture using Block chain technology

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### Abstract

Blockchains play a vital role in FARMAR to track and trace the origin of food products in food supply chain. Supply Chain Management (SCM) is an essential business process in all spheres of the economy. SCM uses specific processes to connect from producer to consumer requirement through a chain. In a BCT (Blockchain Technology) based system, “records are immutable and trusted, eliminating the need for third parties to be involved. Potential farmer-facing impacts include ensuring that farmers receive timely and complete payments through the use of smart contracts and helping

farmers to capture real-time data to more effectively manage their crops and harvests (source: nextbillion.net)". Another benefit of using BCT in FARMAR is security where hacking or tampering the existing data is impossible by any intermediary. As an add-on to this process, IoT devices (Mobile phone-based Android app) are used to update the real-time quality and transit time of the product in FARMAR. It is integrated for improved traceability and usability of the products in the supply chain. The FARMAR aims to achieve these goals by developing a web application where FARMAR creates a value chain of integrity from farm to fork by using BCT

### **Introduction**

Hyperledger Blockchain and Smart contract technology provide many opportunities to produce efficient transactions, data transparency, easy data traceability so that it can produce transparent, fast, and cheap information, and the process does not meet third parties. Hyperledger Blockchain simply conveys information from related parties to another automatically, trusted and safe. Each transaction is made in a block, which will be verified by related parties to other Hyperledger Blockchain in one chain. This is also supported by the presence of digital and cryptographic records. [1, 2, 3] Examples of Hyperledger Blockchain Application in Agriculture are without Blockchain the transaction process is still traditional and involves many collectors in marketing agricultural products when Hyperledger Blockchain is applied, it can break the ecosystem chain of collectors and traders, the consumer can recognize the place of production, they can even know when the crop is harvested and when the expiration date of the chili will be. [4, 5, 6] From the survey results and interviews conducted at the Semarang Regency Agriculture Office regarding agricultural products, especially chili plants, the finding can be illustrated through the following figure. Figure 1. is the distribution channel through several collectors and traders. Figure 1. Chili Supply Chain Flow in Semarang Regency From several related studies regarding Blockchain conducted by Kim, et al on Blockchain and IoT, the technology can provide data security and fraud reduction since every ongoing transaction requires verification from all parties involved in one block. It often happens that diseases transmitted through food caused by cross-border trade are difficult to track, but by using the Blockchain it can identify hazards and information on the stuff which is not good. Equipped with monitoring features of land sensors, satellites, and drones thus improve the quality of plants, soil and reduce waste throughout the food chain. [7]. Further research tells the process of making Blockchains for supply chains in using distributed ledgers, the benefits of Blockchains and how Blockchains work in each transparency and easy traceability of information in goods and data transactions, and also financial resources. Kim, and Laskowski [8] At any related party transactions, each signed a digital contract that can be verified by all parties in a single block, thus allowing the system to identify fraudulent transactions or wrong in reducing transaction misplacement of goods. In its development, it needs infrastructure technology that can be updated continuously or automatically, such as RFID [9]. Research conducted by Tian in China concerning traceability of agricultural food supply chains using data collection RFID and Blockchain technology on food safety issues in traditional agriculture requires traceability of agricultural and food supply chains, identifying traceability of plant supply chains and food security by collecting, transferring and sharing authentic data on agricultural food in production, processing, warehousing, distributing, and sales links used for the safety of defective products, ensuring product freshness, transparency of information, increasing consumer confidence in clear products. [10] In several related studies [7, 8, 9, 10] this journal literature will discuss agricultural issues in Semarang

Regency and continue to discuss supply chains in using hyperledger Blockchain technology in Semarang Regency, Indonesia. Furthermore, it will be illustrated in the supply chain flow diagram in Semarang Regency and will be described in the framework of hyperledger Blockchain technology in agriculture, the technology hopefully can solve current agricultural problems and explain the role of hyperledger Blockchain technology to increase consumer confidence and welfare of farmers by adopting hyperledger Blockchain technology.

### Blockchain-Related Components

Given below are the main Blockchain Architecture components also shown pictorially In

- **User or node**—end user or node within the blockchain.
- **Transactions (deals)**—smallest chunks or building blocks for the blockchain transaction system.
- **Blocks or chunks**—a data structure used for preserving a set of transactions, which is distributed to all nodes in the present network.
- **Purchase Chain**—a sequence of blocks related to a purchase order.
- **Miners**—a specific type of user who performs the block verification and validation processes.
- **Consensus**—blockchain operations carried out after verification according to the set of rules and arrangements.

### Features of Blockchain

**Immutability:** Blockchain technology provides the essential benefit that once a user enters information or data into the blockchain, it cannot be updated or modified during the entire transaction process. This characteristic is called immutability, and it has made blockchain technology very popular. Consequently, blockchain is being used in all sectors where data integrity, data security, and data protection are of utmost importance.

**Autonomy:** Blockchain provides the ability to take decisions individually without intervention by others. It allows the manufacturing and delivery of devices smartly, with IoT-based devices for quick and autonomous decisions in transactions.

**Decentralization:** All transactions of authorized users can be completed over the internet and accessed without any previous intervention. Every registered user has the same ability to monitor and observe the transaction and prepare copies of all transactions [11]. This information will never be changed without other users being intimated [12]. In contemporary internet-based systems, the entire information of a transaction is not saved only on one single server; copies of the transaction data are saved in distributed computers that are considered “nodes” in the blockchain without any supervisory central authority. Then, all the computers are connected to the blockchain network, which is called a distributed ledger because of the distributed data.

**Smart Contracts:** A smart contract works as a digitalized contract, and after certain agreements, it operates automatically [13]. In actual fact, a smart contract is a computerized transaction protocol that enhances trust and speeds up transactions [14,15]. For example, once a product is developed and received at the warehouse, payment is made automatically. Using smart contracts, developers can reduce processing time, manpower, paperwork, and other resources. In a new observation, Maersk observed that more than 30 people and organizations were involved in the shipping of containers containing roses, avocados, and other perishable

goods from Kenya to the Netherlands in the year 2014 [16]. The entire task was managed using smart contracts only; no human intervention was required, and the entire process took ten days. Smart contracts cannot be changed by humans; they are based on the agreements between partners. Blockchain reduces the risk of transactions at all levels and increases the supply chain visibility, reliability, and transparency while protecting stakeholders' benefits.

**Transparency:** Blockchain technology provides a clear and transparent environment. No third party is required as a mediator to provide trust between different parties related to data transactions. Furthermore, even the identities of those involved are hidden with the help of a complex cryptography technique.

### Conclusion

There are currently several problems that make it difficult for farmers to get paid for their produce, such as:

- it usually takes weeks for farmers to receive the full payment for their goods.
- traditional payment mechanisms—usually wire transfers—often take a significant chunk of the farmers' earnings.

Blockchain based smart contracts work by triggering payments automatically as soon as a specific, previously-specified condition has been fulfilled, and without charging excessive transaction fees.

It means that farmers could theoretically receive payment for their goods as soon as they are delivered, without a significant portion of their income being taken away from them in the process.

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### Research on Agricultural Products Logistics and Supply Chain System

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### ***Abstract***

The development of the market, the traditional production and circulation mode of agricultural products can no longer meet the requirements of market informatization and supply chain development. Therefore, it is necessary to study a new production and circulation method of agricultural products to solve the problems caused by traditional methods. We build an innovation system for agricultural product supply chains led by big data service providers, integrating agricultural product supply chain resources, reducing agricultural product circulation links, reducing costs, achieving agricultural product traceability, and ensuring agricultural product quality and safety. Based on this, this article proposes an agricultural product supply chain model based on an integrated management platform, and conducts in-depth research on the logistics operation logic of agricultural product supply chain to provide theoretical basis and data support for the design and development of the management platform.

### **Concepts of supply chain strategic synergy**

The meaning of agricultural supply chain Supply chain is a new term derived from the continuous development of the economy. It is a means of governance from the perspective of management. With the help of modern management theory, it has a good time constraint effect on the production industry This paper defines the meaning of agro supply chain to a certain extent through integration: the core node is the key point of agro-supply chain, and the whole process is controlled and constrained by data, investment and other contents, according to farmers themselves, suppliers of raw materials, breeders, sellers, processors and others. Relevant staffs constitute an organizational structure covering many stages of the Internet of Things.

### **Organizational mechanism of agricultural products logistics**

Obstacles to operational development for a long time, China has carried out the reform of the agricultural industry focusing on the household contract responsibility system. It has to be admitted that the household contract responsibility system can liberate the productivity of our country to a great extent and gradually divide agriculture into many industries of different scales. At present, most peasant households take the decentralized management of one household as the main form to participate in the initial stage of agricultural production and flow. This decentralized mode of operation is not conducive to the overall development of the agricultural industry. With the gradual improvement of the commodity level of agricultural products, the form of household-to-household decentralized operation will expose more shortcomings, resulting in the slow progress of the era of "big circulation" of agricultural products. Therefore, the decentralized forms of production and logistics of farmers have gradually become obstacles to the development of agricultural logistics operation.

### **Profit-making mechanism of agricultural products logistics**

The profit mechanism of agricultural products logistics is established for perfecting the problem of fair distribution of profits. The main reason for the existence of this mechanism is to distribute the profits on the basis of fairness, authenticity, rationality and legality. Next, the profit mechanism of agricultural products logistics should be discussed appropriately.

### **Value creation mechanism of agricultural products logistics**

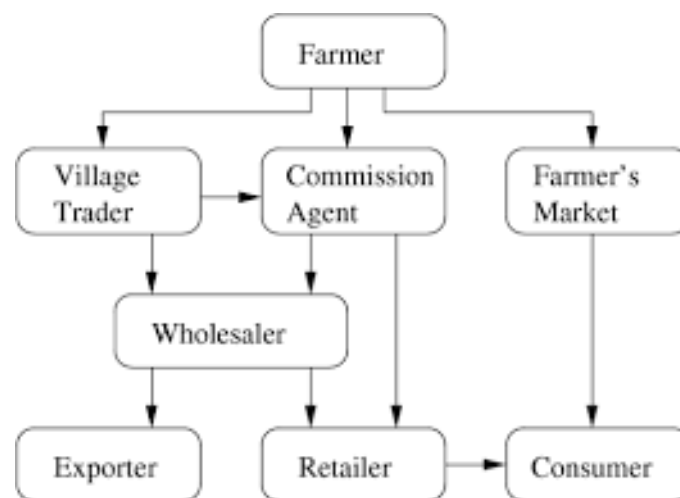
In order to enhance the value of agricultural products logistics, With the continuous improvement of people's living standards, consumers' satisfaction for basic living needs has shifted from eating, clothing and warmth to the pursuit of high quality and efficiency of various services. Therefore, there



are new requirements for the variety, freshness and distribution speed of agricultural products, such as people often go to the fresh counter of supermarkets to buy more fresh agricultural products. Consumers are paying more and more attention to the taste, quality and nutrition of agricultural products. Therefore, vegetables, fruits and fresh agricultural products should maintain their freshness as far as possible in the process of logistics distribution, and more attention should be paid to products which are vulnerable to deterioration caused by external factors. Therefore, we should improve the efficiency of agricultural products logistics service, plan and control the distribution process as a whole, and improve the service level.

### **Selection of agricultural product logistics supply chain model**

At present, the degree of marketization, industrialization, and intensification of agricultural products is relatively low. In particular, fresh agricultural products have gone through many links from the field to the table. The circulation process presents a situation of cross and diversification.



Traditional agricultural product supply chain model

### **Agricultural product supply chain model centered on scattered farmers**

This model mainly uses scattered farmers as the main transaction body. Farmers usually directly trade with consumers at the roadside or nearby farmer's market in the field, and the transaction scale and quantity are small. For fresh and perishable agricultural products, they often lack professional preservation knowledge and technology, and are often at a disadvantage in the transaction process.

### **Components of an Agri supply chain**

Agribusiness, supply chain management (SCM) implies managing the relationships between the businesses responsible for the efficient production and supply of products from the farm level to the consumers to meet consumers' requirements reliably in terms of quantity, quality and price. In practice, this often includes the management of both horizontal and vertical alliances and the relationships and processes between firms.

Agri-supply chains are economic systems which distribute benefits and apportion risks among participants. Thus, supply chains enforce internal mechanisms and develop chain wide incentives for assuring the timely performance of production and delivery commitments. They are linked and

interconnected by virtue of shared information and reciprocal scheduling, product quality assurances and transaction volume commitments.

Process linkages add value to agricultural products and require individual to coordinate their activities as a continuous improvement process. Costs incurred in one link in the chain are determined in significant measure by actions taken or not taken at other links in the chain. Extensive pre-planning and co-ordination are required up and down the entire chain to affect key control processes such as forecasting, purchase scheduling, production and processing programming, sales promotion, and new market and product launches etc.

**Following are the components of an organized Agri- supply chain:**

1. Procurement or sourcing
2. Logistic management
  - a . Transportation
  - b. Material management
  - c. On the premise of supplying mostly from production not stock
  - d. Warehousing
  - e. Logistics Network modeling
3. Organizational management
  - a. Contracting
  - b. Strategic alliances and partnerships
  - c. Vertical integration
    - i. long term storage
    - ii. Packaging technology
    - iii. Cold chain management
    - iv. Energy efficient transport
    - v. Quality and safety
4. Application of Efficient Consumer Response (ECR) System
  - a. electronic scanning of price and product at the point-of-sale
  - b. Streamline the entire distribution chain

**Conclusion**

The continuous progress of the circulation of agricultural products is the primary concern of the "three rural" issues at this stage, and it is related to the environment for the development of the national economy. This article focuses on the research of the operation system of the agricultural product logistics supply chain based on the scientific analysis of big data. From the perspective of computer ecommerce supply chain coordination and agricultural and sideline product supply chain related theories, it analyzes the basic elements and basic characteristics of the existing agricultural product supply chain structure, and studies the cooperative elements, logistics forms, operating mechanisms and profit issues of agricultural product supply chains. It is hoped that this will have a positive impact on the establishment of a circulation mechanism for agricultural products in the future.

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## **An Analytical Study on Effects of Employee Satisfaction on Employee Motivation During COVID-19**

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### **Introduction**

Today, the business setup is changing in relation to the global pandemic of COVID-19. Human resource managers are persistently evolving innovative, creative, and effective ways to engage the employees in a healthier way during this difficult time. Employee engagement is a workplace attitude that is ensuing all adherents of an organization to give of their excellence every day, committed toward their organization's goals and values. Due to lockdown, most of the organizations provide the facility to their employees to work from home. But work from home is difficult for employees as they do not feel the organizational climate at home, as lack of concentration due to frequent invasion of family members; work–life conflict arises due to this. Even they do not have proper equipment and tools (computer, mouse, printers, scanners, headphones, webcam, internet connection, and dedicated workspace—a quiet place to work). Most of the employees feel stressed due to rising ~~as~~ of COVID-19 in the world.

### **Rationale of the study**

In the difficult situation of pandemic, work-from-home regime is implemented by most of the organizations. But work-from-home regime is challenging for both employers and employees. Due to this problem, companies need to engage their employees in refined ways with the help of various employee engagement practices. This paper is to determine the various creative and innovative ways of employee engagement, so that employees can easily do work from home and stay committed, satisfied, and motivated during this pandemic situation.

### **Literature Review**

Robison (2009) suggested on how to manage in turbulent times and keep employees focused and engaged in times of change. Some tips are given by the author like tell employees what organization expects from them, make sure employees have the right materials and equipment, give employees the opportunity to do what they do best, do not forget to give recognition, let your employees know you care about them, and always keep encouraging their development. Employee engagement can be used as a mediator to develop the attitudes, intention, and behavior of employees to an improved work performance (Andrew & Sofian, 2012; Saks, 2006).

Andrew and Saudah (2012) concluded that employee engagement can be utilized as a mediator to enhance the behavior, intention, and attitudes of employees toward a better work performance. Basquille (2013) recommended that managers should be supported by the executive to provide development assistance, career support, and recognition. These factors enhance employee engagement effectively.

## **Research Methodology**

### **Objectives of the study**

1. To study the employee engagement levels in the IT sector of Nagpur during the pandemic.
2. To study the impact of employee engagement on the morale and satisfaction of employees.

3. To suggest effective means of engaging employees during the pandemic.

### **Hypotheses of the study**

Ho- There is no difference in the employee engagement activities during the pandemic and prior to it in the IT sector of Nagpur region.

Ha -There is a significant difference in the employee engagement activities during the pandemic and prior to it in the IT sector of Nagpur region.0 There is no significant impact of employee engagement on the employee morale in the IT sector of Nagpur region.

Ha -There is a significant impact of employee engagement on the employee morale in the IT sector of Nagpur region.

### **Scope of the study**

The study covers the geographical areas of Nagpur district.

The variable under study is employee engagement and employee morale.

### **Sampling Design**

The study population consists of all the all the employees working in the IT sector of Nagpur region. A sample of 55 employees was selected using the convenience sampling technique.

### **Observational design**

Primary Data has been collected using a structured questionnaire. The questionnaire identifies the employee engagement level as perceived by the employees and also the employee morale scores. The questionnaire was developed from the format taken from the literature which was reviewed.

Secondary data was also used extensively in this study. The sources of secondary data were books, websites, online journals, etc.

### **Analytical Design**

Data was collated using the MS Excel software. Charts and graphs were used to represent the data. Hypotheses were tested using the t test and the chi square test.

### **Limitations of the study**

1. The study is limited to the employees of IT sector in Nagpur region only.
2. Measurement of employee engagement and employee morale was based on the questionnaire developed from literature review. It may not be 100% accurate.

### **Conclusion**

1. Most of the employees working in the IT sector of Nagpur are satisfied with elements of Fairness, Involvement and Wellbeing. This is a good sign for the organizations as these factors promote employee engagement levels and thus improve employee morale.
2. On the element of Information, the employees are not satisfied. It is a concern for the organization as it may lower employee engagement level and thus the employee morale.
3. It can also be concluded from the testing of hypothesis 1 that employees in IT sector feel that the employee engagement level was better in the pre pandemic period as compared to the pandemic period.
4. Results of Hypothesis testing 2 have shown a positive correlation between employee engagement and employee morale. This means that by increasing the employee engagement levels the organizations can improve the employee morale levels.

### Recommendations

1. Employee engagement is important to keep the employee morale high and therefore the IT organizations in Nagpur should focus on maintaining the level of employee engagement during the pandemic period also.
2. Innovative and remote activities of employee engagement should be planned by the IT organizations of Nagpur.
3. As the employees are not fully satisfied with the Information element of employee engagement, efforts should be made to improve organizational communication with the employees.

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## **A Study on The Indian Banking System and Their Services in India**

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*Dr. Mahesh Bhalakrishnan, Head of the Department, Rathinam College of Arts and Science, Coimbatore*

### **Abstract**

Banks are the important segment in Indian Financial System. Banking is the backbone of any economy. Indian banking system is very important for the growth of Indian economy. Apart from accepting deposits and lending money, banks in today's changed global business environment offer many more value-added services to their clients. Besides commercial banks, cooperative credit institutions also play important role in the rural economy of the country. Development banks like NABARD, SIDBI, NHB and EXIM Bank are providing refinance facilities to commercial banks and other financial institutions. The Reserve Bank of India as the Central Bank of the country plays different roles like the regulator, supervisor and facilitator of the Indian Banking System. Industries like Logistics, Supply Chain Management, Aviation are growth industries requiring a huge sum of capital. A strong and efficient banking system is essential for these industries. With this objective in mind an effort has been made to study the Indian Banking system, its constituents, services provided by them.

**Key words:** *Logistics, Supply Chain, Aviation, NABARD, SIDBI, EXIM Bank, Indian Financial System, Indian Banking system.*

### **Introduction**

Modern banking in India originated in the mid of 18th century. Among the first banks were the Bank of Hindustan, which was established in 1770 and liquidated in 1829–32; and the General Bank of India, established in 1786 but failed in 1791. The largest and the oldest bank which is still in existence is the State Bank of India (SBI). It originated and started working as the Bank of Calcutta in mid-June 1806. The Reserve Bank of India was established in 1935, under the Reserve Bank of India Act, 1934.

In 1960, the State Banks of India was given control of eight state-associated banks under the State Bank of India (Subsidiary Banks) Act, 1959. However, the merger of these associated banks with SBI went into effect on 1 April 2017. In 1969, the Government of India nationalized 14 major private banks; one of the big banks was Bank of India. In 1980, 6 more private banks were nationalized. [8] These nationalized banks are the majority of lenders in the Indian economy. They dominate the banking sector because of their large size and widespread networks.

The Indian banking sector is broadly classified into scheduled and non-scheduled banks. The scheduled banks are those included under the 2nd Schedule of the Reserve Bank of India Act, 1934. The scheduled banks are further classified into: nationalized banks; State Bank of India and its associates; Regional Rural Banks (RRBs); foreign banks; and other Indian private sector banks.

### **Banking Sector now**

The Indian banking sector is broadly classified into scheduled banks and non-scheduled banks. All banks included in the Second Schedule to the Reserve Bank of India Act, 1934 are Scheduled Banks. These banks comprise Scheduled Commercial Banks and Scheduled Co-operative Banks. Scheduled Co-operative Banks consist of Scheduled State Co-operative Banks and Scheduled Urban Cooperative Banks. With the growth in the Indian economy expected to be strong for quite some time-especially in its services sector-the demand for banking services.

### **The Constituents of the Indian Banking System include:**

- (a) Commercial Banks:
- (i) Public Sector Banks

- (ii) Private Sector Banks
- (iii) Foreign Banks
- (b) Cooperative Banks:
  - (i) Short term agricultural institutions
  - (ii) Long term agricultural credit institutions
  - (iii) Non-agricultural credit institutions
- (c) Development Banks:
  - (i) National Bank for Agriculture and Rural Development (NABARD)
  - (ii) Small Industries Development Bank of India (SIDBI)
  - (iii) EXIM Bank
  - (iv) National Housing Bank

### **Functions of Commercial Banks**

As per Sections 5 & 6 of Banking Regulation Act, 1949 the functions can be divided into two parts which a commercial bank can transact. (a) **Major functions:**

- (i) Accepting Deposits
- (ii) Granting Advances
- (b) **Other functions:**
  - (i) Discounting of bills and cheques
  - (ii) Collection of bills and cheques
  - (iii) Remittances
  - (iv) Safe custody of articles
  - (v) Safe Deposit Lockers
  - (vi) Issue of Letter of Credit
  - (vii) Issue of Guarantees
  - i) Investment Counselling
  - (ii) Investment Banking
  - (iii) Mutual Fund
  - (iv) Project Appraisal
  - (v) Merchant Banking Services
  - (vi) Taxation Advisory Services
  - (vii) Executor Trustee Services
  - (viii) Credit Card Services
  - (ix) Forex Consultancy
  - (x) Transactions of Government Business
  - (xi) Securities Trading
  - (xii) Factoring

### **Export Import Bank of India (EXIM Bank)**

Export-Import Bank of India was set up in 1982 by an Act of Parliament for the purpose of financing, facilitating and promoting India's foreign trade. It is the principal financial institution in the country for coordinating the working of institutions engaged in financing exports and imports. Exim Bank is fully owned by the Government of India. regional financial institutions and commercial banks. Exim Bank also extends Buyer's credit and Supplier's credit. . Exim Bank helps Indian companies in their globalization efforts through a wide range of products and services offered at all stages of the business cycle.

### **Conclusion**

Banking sector in Indian has given a positive and encouraging responses to the financial sector reforms. The financial sector reforms have helped Indian financial system to move closer to international standards. Development banks like NABARD, SIDBI, NHB and EXIM Bank are providing refinance facilities to commercial banks and other financial institutions. Industries like Logistics, Supply Chain Management, Aviation are growth industries requiring a huge sum of capital. A strong and efficient banking system, the providers of capital is very essential for these industries in their growth and development.

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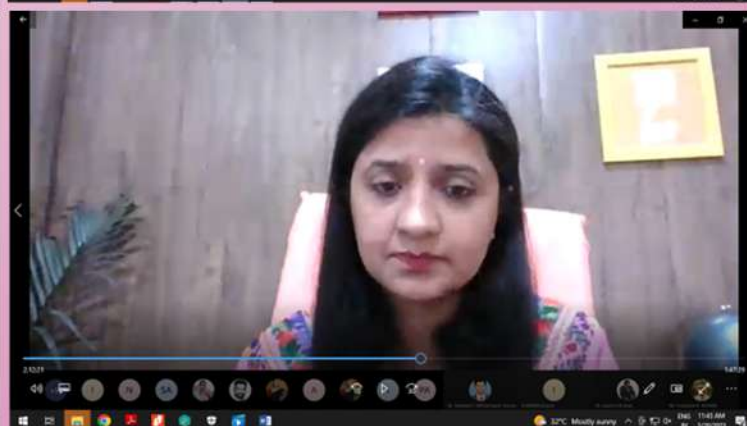
## GLIMPSES OF CONFERENCE







**VIRTUAL INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND BUSINESS TRANSFORMATION CONDUCTED ON 21<sup>st</sup> AND 22<sup>nd</sup> MAY 2021  
IN ASSOCIATION WITH MALASIA UNIVERSITY OF SCIENCE AND TECHNOLOGY**





### **Customer Service Quality and Customer Preference towards Online Shopping**

*Mr. P Anbarasan, Assistant Professor, Department of Management Studies, Tagore Engineering College, Chennai.*

*Dr. N Bargavi, Associate Professor, Department of Management Studies, Bharath Institute of Higher Education & Research, Chennai.*

#### **Abstract**

Rapid stride in technology and networking has opened new avenues for online shopping in far and remote areas of India as well. The aim of the study is to find out the impact of customer satisfaction in respect of customer service quality and customer preference and it mainly focused on the in-depth issues regarding the nature and quality of service provided in online shopping. It is well-known fact that organized retailing is making a strong impact in many products of India growing economy. This study reveals the preference of services quality dimensions like physical aspects, reliability, personal interaction, problem solving and policy which assess the retail service users. The responses given by the online shopping customers are analyzed and interpreted using different statically tools such as chi square and Correlation test. It is found that overall, in online shopping is within the acceptable level.

**Keywords:** *Customer, Retail, Services, Quality.*

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### **Synergistic Effect of Psychological Capital and Bricolage: An Innovative Strategy**

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*Mr. Jigmet Stobdan, Assistant Professor, Department of Commerce, Leh Campus, University of Ladakh*

#### **Abstract**

A company with innovative strategy can achieve the organizational goals. In today's cut throat competition efficacy, hope, resilience and optimism play an important role for every entrepreneur. The main purpose of this paper is to examine the effect of psychological capital and bricolage on innovation. The study collected data from manufacturing industry from Gujarat. The study used various statistical tools like, SEM, SPSS, AMOS to examine the objective. After analyses the data the study found that psychological capital (efficacy, hope, resilience and optimism) and bricolage are the important strategy for innovation. Our findings also demonstrate that bricolage is an important characteristic for innovation because it creates innovative things with whatever resources in hand among manufacturing entrepreneurs. Further, the study found that the synergistic effect of psychological capital and bricolage leads to more innovative product in manufacturing sector. The future research shall be conducted on service sector.

**Keywords:** *Psychological Capital, Bricolage and Innovation*

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## **Innovative Marketing Strategies in India After Covid - 19**

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Vellalar College for Women (Autonomous), Erode, Tamil Nadu.*

### **Abstract**

COVID-19 had disrupted almost all the companies that lead to huge unemployment, distress and financial problems among people across the world. Although COVID-19 had stimulated social distancing and self-quarantine for some months, people were not only spent their time in relaxation and entertainment but also concentrated in education. This paved the way for many companies and start-ups to use educational and informational content in their marketing strategy such as webinars, workshops, online classes, and courses that have genuine value and won customers. Healthy innovation strategies can reap healthy reimbursement for a business. Today there are varieties of opportunity available for all the industries and start-ups that are opting for innovative strategies. Many studies had proved that correlation between value for customers and innovation has grown stronger over the last two decades. Therefore, this study aims to bring an insight on best innovative marketing strategies adopted by the Indian companies after COVID-19 to position their business towards remarkable success.

**Keywords:** *Business, Company, COVID-19, Customer, Innovative, Marketing, Strategies*

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## **Privatization and Development in ALS**

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Mr. Sriman. S, Sri Krishna Arts and Science College- Coimbatore*

### **Abstract**

Aviation logistics and supply chain management are the key issues encountered when it comes to air transport, for passengers, as well as cargo. Driven by information and communication technology, supported by data-driven optimization for decision making, global supply chain management now plays a crucial role in the current aviation industry. The topic we will be presenting is privatization (the transfer of a business, industry, or service from public to private ownership and control) and development (the process of developing or being developed.) in aviation. So from our research we finally found some development in ALS with interventions of privatization sector development and through suggestions of experts we can develop ALS in further modern era.

**Keywords:** *Aviation, Development and Technology*

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## **Privatization and Development of Aviation, Logistics and SupplyChain Management**

*Mr. Sanjay R, Vels University, Chennai*

*Mr. Prasanth, Vels University, Chennai*

### **Abstract**

It is now over 30 years since the first airport privatization occurred with BAA in the UK in 1987. Therefore, the aim of this paper is to assess the impacts of this development and evaluate its effectiveness, using examples from all over the world. It begins by considering some key issues such as the extent of government involvement; the selection of operator/investor; the choice of network/group versus individual operations; and the relevance of economic regulation. This then leads on to an investigation of measures of success, particularly in relation to efficiency and service quality. Reflecting on the privatization journey, the paper defines key changes that have occurred concerning how privatization is considered now compared to its early days in terms of motivation, geographical reach and type of model, investor and sale. It also highlights the importance of the regulatory and competitive environment and briefly considers the impact of the corona virus pandemic in 2020. The most recent estimates suggest that demand for air transport will increase by an average of 4.3% per annum over the next 20 years. If this growth path is achieved by 2036 the air transport industry will then contribute 15.5 million in direct jobs and \$1.5 trillion of GDP to the world economy.

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## **Green Practices in Aviation Logistics and Supply Chain Management**

*Ms. Sidhu G, Vels University, Chennai*

*Ms. Anuj velani, Vels University, Chennai*

### **Abstract**

At first, we have explained the process of aviation logistics and supply chain management. we have mentioned few developments in this sector in the industry and how these developments are going to pave a way for scope of progress.

Our objective is to explain the green practices being taken into play in aviation logistics and supply chain management. Here we explained the negative effects the aviation industry has on the environment and its relation to the supply chain and logistics. We have also mentioned and explained the initiatives taken by various airlines and companies in the aviation industry to tackle this issue on their level. At first, we have explained the process of aviation logistics and supply chain management. we have mentioned few developments in this sector in the industry and how these developments are going to pave a way for scope of progress.

Our objective is to explain the green practices being taken into play in aviation logistics and supply chain management. Here we explained the negative effects the aviation industry has on the environment and its relation to the supply chain and logistics. We have also mentioned and explained the initiatives taken by various airlines and companies in the aviation industry to tackle this issue on their level.

**Keywords:** Logistics, Green Practices, Development

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## **Governance Issues and Challenges in Policies On Aviation.**

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*Ms. Lavisha Sharma, Vels University, Chennai*

*Mr. Vivek Surya Dantu, Vels University, Chennai*

### **Abstract**

Airport, airline and civil aviation regulation governance has always been paramount in propelling the aviation industry forward, especially in light of the global pandemic, COVID-19. The world, and in context, the aviation industry has had significant pressure to adapt to changing situations and to immediate effect. While airline demands were at an all-time low, airports and regulatory authorities have had to carry out mandated responsibilities to allot special slots for airport operations, viz., repatriation, diplomatic missions, cargo and logistical challenges etc., to safeguard international trade and economic ties. Workforce challenges through immediate effect trends, putting in place safety protocols to help mitigate the spread, while keeping personnel and operations running have truly been the true test of aviation resilience. The regulatory authorities, airlines and airports together have had to come up with operational changes, management of change protocols, personnel training, laying off staff to preserve operational budget, slashing international discounts between agreed parties so costs are alleviated etc. A greater deal of the above prospects has been discussed in this paper and we seek plausible solutions in these areas through this discussion.

**Keywords:** COVID-19, International Airlines

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## **Employee Retention**

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*Mr Riyaz, ISSM*

*Ms. Nalini, Velammal*

### **Abstract**

Employee retention is a process in which the employees are encouraged to remain with the organization for life time or maximum period of time. It is a strategic tool for the success of the firm. Employee retention is a technique adopted by businesses to maintain an effective workforce and at the same time meet operational requirements. Employees are the greatest asset for an organization. Therefore, every organization must treat their employees as ends and not means to ends because they add value to the organization.

Employee retention is a strategic tool for the success of the firm. Having the best and the most talented employees is not the only answer but it is equally important to retain them for long term benefits to both the organization and employees. Encouraging employees to remain in the organization for a long period is known as employee retention. It is a process in which the employees are encouraged to remain with the organization for life time or maximum period of time. To manage top talent, it involves a constant balance between the human desires and the strategic and financial needs of the business. Employee retention is a technique adopted by businesses to maintain an effective workforce and at the same time meet operational requirements. Employees are the greatest asset for an organization. Therefore, every organization must treat their employees as ends and not means to ends because they add value to the organization. Long-term health and success of any organization depends upon the retention of key employees. To a great extent customer satisfaction, organizational performance in

terms of increased sales, satisfied colleagues and reporting staff, effective succession planning etc., is dependent upon the ability to retain the best employees in any organization.

**Keywords-** Talent, Employee Retention 1

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### **Innovative Strategies for Logistics and Supply Chain Management**

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*Dr. S. Mohan, Dr. N.G.P Arts and Science College, Coimbatore*

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#### **Abstract**

This article is all about innovative strategies for Logistics and Supply Chain Management in Technologies, Business Models and Risk Management. The Logistics sector is being evolved or transformed from by a new generation of innovative solutions. Whereas, economic and environmental innovators examine the industry's greatest challenges and developing new business models through introducing new technology and maintaining risk management. Some of the most important innovations which are likely to have the most impact on the industry in the coming years i.e., On Technology perception (Internet Of Things) On Business Models, it is a broad one, including companies internal work as well as their relationships with customers and suppliers. So, we have explore this exciting concept in our research. Finally, Risk Management includes controlling the risk and avoiding the wastage of resources. **Keywords:** Logistics, Supply Chain, Technology, Innovation and Risk Management.

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### **Impact Of Covid-19 In Als Sector**

*Mr. Nidish Vijay (VISTAS) Mr. Joshua Samuel (VISTAS)*

#### **Abstract**

The outbreak of COVID-19 has affected the Aviation, logistics, and supply chain industry far worse than we have imagined. The article describes the epidemic's impact on ALS-Aviation, Logistics, and Supply chain. Here we'll cover the economic downfall of the industries and various sections where ALS had gone down. In aviation, we cover the travel restrictions and drastic fall in demand among travellers. In the field of flight cancellations, air cargo, and business aviation. In form of sectors, countries, travel, the spread of the virus, hazard controls, and vaccination protocols. In logistics, we cover basic logistics, logistics technologies in aviation, planning, and organization of air transportation, economic and physiological requirements, passenger check-in, and other aviation-related activities. In the Supply chain, we would study the risk and challenges, supply chain planning, priorities for planning, supply chain procurement, and post-COVID procurement of supply chain.

**Keywords:** COVID -19, Aviation, Logistics

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## **Business Sustainability Practice of Aviation, Logistics and Supply Chain sector**

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*Mr.Vignesh Rajasekar, VELS University, Chennai,*

### **Abstract**

The story of commercial air travel began in the year 1914, when the world's 1<sup>st</sup> scheduled passenger aircraft took off, since then air transportation has completely revolutionized the transportation industry. Apart from commercial air travel the other two sectors of the aviation industry, namely general aviation and military aviation have also had their fair share of developments since its invention. Over the years air transportation has become the most convenient and fastest mode of transportation- thus increasing the number of flights. Setting aside the positive aspects of increased number of flights, it is essential to focus on its drawbacks as well. The rapid growth of the aviation industry has become one of the major contributors to certain global issues such as climate change, global warming etc. and incorporating sustainable practices is one of the most straightforward solutions to tackle such issues. This paper aims to highlight why it is crucial to implement sustainability measures in aviation, logistics and supply chain management. With increasing awareness on sustainability in recent years several airline companies have dedicated themselves to making their flights more sustainable. This has resulted in the discovery of Sustainable Aviation Fuel (SAF) and many other holistic strategies which consequently influence a sustainable future for the aviation industry.

**Keywords:** Sustainability, Supply Chain

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## **Study and Explore the Crash of Green Supply Chain Management -InIndia**

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### **Abstract**

Green supply chain management can be explained as a supply chain management system which is valuable for the environment and which consists of designing of products, selection of raw material, manufacturing steps and delivery and preparation of final product through a stable and sustainable process. Sustainability is the major key to supply chain, emerges as the understanding of all the phases of production up to final allocation. This paper mainly focuses on the significance and want of term 'green' and concepts or activities which are related to greener activities in areas like manufacturing and remanufacturing of products having a green crash on, controlling of travel costs and waste products, reverse logistics etc. The principle is to understand the crash and also to make people aware about the major difficulties, problems and also the advantages and profits which are a part of such a great green concept if it is successfully employed or installed during the process of supply chain management in a variety of organizations.

**Keywords:** Production Management, Supply Chain, Green, Sustainability, Manufacturing, Materials.

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## Profit and Loss in an Airline

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*Mr. Vivek Surya Dantu (VISTAS)*

*Mr. Shaik Thousif (VISTAS)*

### Abstract

Globally the aviation industry accommodates a living for 87 million people. In this day and age, there are over 5,000 airlines with ICAO codes operating worldwide. Compared, to the early years the sum total travelling of passengers by flights have rose enormously, as it provides the comfort as well as saves one's time. However, for years the airline's finance has been going back and forth in between profit and loss. The primary aim of this paper is not just to discuss the profit and loss made by an airline but also to shed some light to the current financial health of an airline. With the transformation in business environment, the cost-revenue of an airline has seen a massive change over a period of time, as a result airline's economy changed dramatically. Generally, the type, size, age of aircraft, the crew complement, is some of the basic requirements which the airline need to see, and it affects the budget as well. The rise of aviation fuel, the depreciation of money and the airport taxes adds up extra costs in the financial chart of an airline. This paper, factors lead in loss, the impacts of loss, the financial condition of airline and how an airline makes profit, will be covered.

**Keywords:** Flights, Aviation

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## Business Sustainability Practice Of ALS

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*Mr. R. Ajai, student, Kongunadu collage of arts and science*

### Abstract

The actuality of the topic was the fact that nowadays, the aviation has become an important Part in connecting people. It is enabling it to reach almost anywhere all over the world. With the entry of Low-cost airlines, aviation has become available to a larger segment, which has stimulated the industry. During the elaboration of the subject, it became a fact that inquiry of the entire supply chain of An airline also requires information that companies are reluctant to share with the outside world. So, the paper is examining the value chain according to the information available. It is involved To well-known European airline to the investigation - a low cost airline. Over the past few decades, the negative changes in the global climate have been increasingly occupied by People; that's why it is prompting companies around the world to take the issue more seriously and impact of their company's ecological footprint. The research provides a comprehensive analysis of the value Chain of the aviation, focusing on sustainability, illustrating the complexity of the airline supply chain. While current forecasts make positive predictions for civil aviation, changes in environmental impacts Could radically change this sensitive industry at any time.

**Keywords:** Aviation, Value Chain

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## **Innovative Strategies for Aviation, Logistics and Supply Chain Faculty**

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*Mr Vivek Nishanth, Sree Saraswati Thyagaraja College, Pollachi*

### **Abstract**

Aviation logistics and supply chain management are the key issues encountered when it comes to air transport, for cargo/goods procurement. Supply chain management (SCM) is seen as centralized management of the flow of goods and services and includes all processes that transform raw materials into final products by managing the supply chain, companies can cut excess costs and deliver products to the consumer faster and more efficiently aligned with the roles of logistics feature transportation/delivery, storage, packaging, cargo handling, distribution processing, information processing, and many systems have been put in place to deliver products from the production location or factory to the consumer quickly and on time. Air transportation (Aviation) provides critical capabilities for a modern economy. Whether it involves passengers or cargo, the ability to quickly and reliably move valuable resources over great distances improves the quality of life and standard of living of people across the globe. While you may be more familiar with the term "aviation" than "logistics," you observe logistics in action any time you travel or purchase a product. This paper devises plans and finds innovations to improve the efficiency of aviation logistics and supply chain management through COST MINIMIZATION and ACCESSIBILITY in the type of products, devices, services, technology or environments so as to be usable by suppliers and buyers even in remote locations. Provided suggestions with the risk modelling and its alternatives as a prior concern in aviation logistics and solutions in understanding from the domain and supply perspective domestically and globally. Addressed the updates needed from the primitive technology used in procurement organizations to the robust technology implementation in aviation logistics and supply chain. Usage of Unmanned Aerial Vehicles for immediate responses lagging in its expansion and effective implementation for the lighter and faster medium of transporting through as an aviation model.

**Keywords:** Logistics, Aviation

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## **Green Practices in Aviation, Logistics and Supply Chain Management**

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*Dr. C. Esakkiammal, Assistant Professor, PSGR Krishnammal College for Women, Coimbatore.*

### **Abstract**

With the rapid economic growth and tremendous advances in technology and science the awareness of environmental protection has become a worldwide concern. The global warming and climate change are the growing threats which forces the world towards some green practices in all industries. Aviation, logistics and supply chain management industries are being the base and connecting the world with its needs on time. The green practices in these industries will bring a great change and serves an example for its connected sources. The eco-friendly and green business model from manufacturing to its consumption is the need and increasing demand right now in the world. This article contains some of the green practices in the aviation, logistics and supply chain management industries.

**Keywords:** Green practice - Aviation - Logistics - Supply Chain Management - Eco friendly.

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## Green Supply Chain Management Practices

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### Abstract

Green supply chain management is evolved from supply chain management (SCM). The concept of SCM was introduced and popularized in the 1950s when manufacturers minimized the production costs. This paper investigated the impact of both pro-active and re-active practices in the implementation of GSCM. These include (i) pro-active practice – green purchasing practices, (i) eco-design practices, reverse logistics practices, and (ii) re-active practice – legislation and regulation. The adoption of green purchasing is one of the commonly accepted dimensions of GSCM practice. This involves evaluation of suppliers based on environmental criteria. The importance of eco-design was identified by when they revealed that about 80% of product-related impacts on the environment can be influenced during design. It examines the intricate relationship between green practices and organizational performance within the context of the business strategy adopted by organizations.

**Keywords:** Supply chain management, Business Strategy and GSCM.

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## Internet Of Things in Als Sector

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### Abstract

Internet of things (IOT) is considered at the net evolutions of internet. Now days it has highlighted some of the most important technologies. It is considered to be global networks of things and interconnected with each other. It is uniquely recognized to be smart object and have their virtual representation on internet. The resources using the internet make use of multiple interconnected technologies like WSN (Wireless Sensor Network) and RFID (Radio Frequency Identification). Collecting information from the surrounding environment to analyze, control and making current idea for IOT. Also, integration of IOT with cloud provides improved services to the ALS sectors. ALS has the features of tracking and development of smart warehouse systems. ALS helps to prevent it from manufacturing to transport and delivery. In pandemic situation the applications deal with issues and challenges of IOT technology.

**Keywords:** Internet of things, ALS, Wireless sensor networks, RFID.

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## **Policy Development on Tourism After The Covid-19 Supply Chain Management**

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### **Abstract**

Over the last thirty years of research into tourism policy, there has been a dominant assumption that the appropriate role of the state in tourism is mostly settled. The state has a legitimate role in the tourism industry, but it is essentially one of 'steering and not rowing'. This assumption has developed against the backdrop of the neoliberal shift towards small states, powerful markets and light touch policy interventions in industry. This research note argues that the measures that have been taken by governments around the world in respect of their tourism industries, in response to the COVID-19 pandemic, are sufficiently significant and long-term to warrant a re-appraisal of the role of the state in tourism. Specifically, this note makes the case for a renewed focus on research into tourism policy in non-Western contexts, where the role of the state has not been as constrained by the neoliberal shift, and for an increase in international comparative policy research, which has been notably absent in the tourism policy field to date.

**Keywords:** Tourism industry and policy research.

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## **Logistics And Operations Management**

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### **Abstract**

Logistics management is a detailed process of organizing and implementing an operation. When it comes to business, that process is the flow of work from the beginning to the end, in order to fulfil customer expectations as well as those of your organization. Contemporary organizations need to produce and deliver products and services on time, within budget, effectively, and efficiently to remain competitive. However, as demand spreads across vast geographies, viability is constantly under threat. With the help of logistics and operation management we can meet these threats. The purpose of logistics management is obviously about finding more efficient and effective ways to move resources and products from conception to completion and, finally, to the customer. But the driving force of these actions is to meet customer demand and provide the best service possible to retain customers and maintain their satisfaction by meeting their requirements. Logistics management helps in planning, implementing, and controlling the flow and storage of goods, services, and related information from a point of origin to its consumption meanwhile operations management helps in management, control and supervision of goods, services, and people.

**Keywords:** Operations management, Logistics management, Planning and Services

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### **Impact Of Covid 19 On Als Sector**

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#### **Abstract**

Manufacturing plays an important role in the development of nations by contributing to the GDP. manufacturing industries are the major contributor in the global economy. At present time, world is facing the outbreak of pandemic COVID-19, the coronavirus pandemic impacted the production, logistics as well as the supply chain system and aviation in the entire world. As companies, around the globe are trying to repair their shattered value chains in the short-term and reduce their supply chain risks in the long-term, India also has an exclusive chance to emerge as a business terminus during and after the COVID-19 pandemic. In this present paper we have discussed the effect of COVID 19 on ALS and Indian economy. There are total of 18 Critical barriers are found out which affected the supply chain in the India. It is expected that this study will be helpful to develop the conceptual models to overcome from this issue.

**Keywords:** Economic disturbance - Logistics - Supply chain system - Exclusive chance - Business terminus - 18 Critical barriers - overcome the issue.

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### **Supply Market Intelligence**

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*Psgr Krishnammal College for Women, Coimbatore.*

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#### **Abstract**

In this fast-moving world the supply of materials must be rapid. The efficiency of supply chain management determines the increased profitability and maintaining the level of expectation of the customers. When the speed of supply increases the challenges also grows. Most of the challenges faced by supply management includes inventory management, multiple channels of markets etc. Supply market intelligence acts as a remedial measure to overcome this hindrance. By making use of the methods in supply market intelligence the company gets sufficient data to manage their risks, control the expenditure and increase their gains and to ensure the satisfaction of their customers.

**Keywords:** Difficulties in supply management - Supply market intelligence - Meaning - Methods - Desk research - Electronic data interchange (EDI) - Risks of not gathering SMI - Conclusion.

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## **Impact of Covid 19: Aviation, Logistics, Supply Chain**

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### **Abstract**

The COVID-19 pandemic is entering its endemic stages in some parts of the world like airlines hemorrhaged \$168 billion in economic losses in 2020. Although the temptation is to pin the blame solely on the pandemic-induced plunge in passenger traffic, that would be to ignore the airline industry's underlying and long-term health problems. As we have noted, the pandemic wreaked financial devastation across the aviation value chain, most notably for airlines. All subsectors reported massive losses in 2020 except for freight forwarders and cargo airlines which benefited from a rise in demand for air cargo. Even previously reliable value creators such as airports and manufacturers were not spared the pandemic's economic impact. Logistics firms, which are involved in the movement, storage, and flow of goods, have been directly affected by the COVID-19 pandemic. As an integral part of value chains, both within and across international borders, logistics firms facilitate trade and commerce and help businesses get their products to customers. Due to strict lockdown, the manufacturing and logistics activities have been suspended, and it has affected the demand and supply of various products as a result of restrictions imposed on shopkeepers and retailers.

**Keywords:** Covid-19 Pandemic

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## **Policy Development on Tourism after the Covid-19 Pandemic**

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### **Abstract**

The policy briefly provides the urgency of tourism impact from pandemic on livelihoods, individuals, especially for youth and casual workers major elements of the quarantines introduced during coronavirus disease Covid-19 pandemic was crisis for much longer than other economic and they continue to struggle until people feel safe for traveling worldwide and it also brought misery for those who love to travel. It also states the quality of human resources in tourism and opportunity creation and tourism related infrastructure. The adoption of international travel restrictions contains policy response to covid-19 pandemic using data from 136 countries. We have to digitize more to reduce physical touch, make places accessible for all. The spread of the virus has been reduced the burden on Healthcare systems, as a part of government's 'look east policy' government implemented lockdowns, and restrictions around the world to signify the risk management, These protocols include social distancing, a voidance over populated and hygiene and safety. The study finally concludes the tourist crisis and response to tourist risk management. Tourism is among the industries hardest hit by the Covid.

**Keywords:** covid-19, pandemic, coronavirus, international travel, Healthcare systems

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### **Supplier Management- An Impact of Covid 19 on Aviation Industry**

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*Ms. R. Jyothika, Student, III B. Com (CA), PSGR Krishnammal College for Women, Coimbatore*

#### **Abstract**

The purpose of this study to analyze domestic and international experience in supply chain management (SCM) of the aviation industry to enhance the competitiveness of aircraft factory products. In our paper, we designated specific production of civil aircraft issues, which have, from the authors' view point, the major influence on the industry product competitiveness for the aircraft factory. With the crisis in full swing and countries in shut down mode, the economic rebound scenarios are uncertain. A quick recovery becomes unlikely by the day. The shock of COVID-19 is impacting global GDP and presents a significant challenge to aerospace OEM and suppliers' revenue, EBIT and cashflow. Our findings imply that: (i) the automobile industry perceived that the high-quality techniques to mitigate dangers related to COVID-19, were to increase localized supply assets and use advanced industry 4.0 (I4. Zero) technology. (ii) The airline enterprise on the other hand, perceived that the immediate want became to get ready for enterprise continuity demanding situations posed by COVID-19, by defining their operations both on the airports and in the flights. Keywords—Supply Chain Management (SCM), Quality Improvement, Aviation Industry, Aircraft Factory

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### **Policy Development on Tourism after Covid-19 Pandemic**

*Mr. Gokul. T, Shree Venkateshwara Hi-Tech Engineering College, Gobi*

*Mr. Tharaniathan. D, Shree Venkateshwara Hi-Tech Engineering College, Gobi*

#### **Abstract**

Study stipulates phase to observe the proposed mechanism in formulating the travel and leisure industries recover strategies. The present pandemic covid-19 has resulted in global challenges, economic and health care crises, and post spill over impacts on the global industries, including tourism and travel that major contributor to the service industry worldwide. The tourism and leisure industry has faced the covid-19 tourism impacts hardest-hit and lies among the most damaged global industries. The leisure and internal tourism indicated and steep decline amounting to 2.86 trillion US dollars, which qualified more than 50 percent of revenue losses. In the first step study explores and consequences and settings of the covid-19 pandemic and innovation and changes can contribute to the tourism industry revival to the new normal. Thus, the study determines the tourism enterprises and scholars must consider and change the basic principles, main assumptions, organizational situations related the study discusses direct covid-19 tourism impacts, attitudes, and practices in gaining the leisure industries doom recovery. In the third phase, the study proposes to observe the characteristics and covid-19 tourism consequences on the travel and tourism research. the finding provides insights in regaining the tourism industry operational activities

and offer helpful suggestions to government officials, scholars and tourism firms to reinvest in the tourism industry to set back to normal position.

**Keywords:** Tourism Contribution to global service industry, international tourism and policy improvement in India

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### **Supply Chain Performance**

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#### **Abstract**

Supply chain improvement often results in better economic value; therefore, important insights to improve the supply chain performance (SCP) in fishing industry of Indonesia are investigated. Fishing industry of Indonesia has important role to create employment opportunities and has important role in economic development. However, supply chain issues in this industry are more threatening towards the performance of this industry. Low performance of this industry has adverse consequences on economic development. The current study attempted to address the problem through service innovation and market intelligence. Hence, objective of this study is to investigate the effect of service innovation on SCP. The role of market intelligence is also examined. After collecting the data from managerial employees of fishing companies, it was analyzed through structural equation modelling which revealed that service innovation and market intelligence has crucial role to boost SCP. Better service quality and market intelligence mechanism improves the performance of fishery companies. Thus, these companies should focus on service innovation and market intelligence.

**Keywords:** Supply Chain, Economic Value, Market Intelligence, Fishing Industry, Performance, Structural Equation Modelling.

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### **Supply Market Intelligence A Success Factor For The New Era For Procurement**

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Mr Jegathiswara, Shree Venkateshwara Hi Tech Engineering College*

#### **Abstract**

Supply Market Intelligence (SMI), procurement intelligence, sourcing intelligence, or simply put-Market Intelligence (MI) – is one of the most critical inputs for the sourcing process. Best in class organization have embedded supply market intelligence as an integral part of their sourcing process to reduce risk and enhance savings. Read on to know how a robust and effective Supply Market Intelligence strategy can be a competitive advantage for procurement organizations.

**Keywords:** SMI strategy framework, market intelligences, competitive advantages, drive end to- end sourcing support, change management, knowledge management.

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## **An Analytical Study of Sustainability liaison Green Economic Development**

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### **Abstract**

Sustainability development is essential to attain the good quality of life. Sustainability development is prerequisite for the reason that poor uneducated human with good physical health, or populated environment for living the elite human and religious freedom without food has not good indicator for future development. Even though, sustainability contributes in socio-economic development that must ensure us to long term business success along with healthy and stable environment in society.

As per the Yale center for environment Law & Policy, reported that India had score last out of all 188 countries due to lacking in the field of ecosystem vitality and climate policy based on parameter like species habitat index, unsustainable fishing ecosystem services loss, carbon emission and emission of greenhouse gas precipitate. Consequently Bank 's need has arises to support the sustainable development known as green finance. Firstly, paper analyze the concept of sustainability followed sustainability challenges and opportunities faces before getting sustainability development. Last but not least paper discuss about the measure set up taken by Indian Bank towards the sustainable development.

**Keywords:** Development, Environment

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## **The Impact of Digital Transformation on Supply Chains through E-Commerce**

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### **Abstract**

One of the profound impacts of digitalization on supply chains is manifested through e-commerce. The latter has significantly grown during the last two decades, with further amplifications during the COVID-19 pandemic. This has created operational and policy making challenges for firms when deciding about how best to manage the resulting growth in e-commerce. While the impact of e-commerce on supply chains has been widely recognized in the literature, there was no effort to systematically review the literature, conceptualize some of the challenges and propose future research directions. We classify the reviewed literature based on which supply chain drivers were investigated, as well as, the employed research methodology. In addition, we conduct network and content analysis to uncover the main research themes and potential research directions namely, developing analytical centred; modelling based ecosystem for environment; leveraging data mining to enhance sustainability; balance between growth and sustainability; consumer demand and uncertainty; coordination in e-commerce logistics; last mile alternatives and cost management of innovative technique implementations. Furthermore, based on our literature review, we propose a conceptual framework where we interlink supply chain stages with a firm's business strategy, digital transformation strategy and performance.

**Keywords:** Digitalization, E-commerce, Supply Chain, E-commerce Logistics

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## **Ramification of Covid-19 on Endurability of Indian Airlines and the FateForward**

*Ms. Pallavi Datta, Research Scholar, Institute of Management (Christ University) Mr Yugantar Singh, Research Scholar, Institute of Management (Christ University)*

### **Abstract**

SARS-CoV-2 took the entire world on a carousel. The pandemic not only claimed millions of lives on this earth but also compelled the world to a halt. Covid 19 disrupted every imaginable industry in this world. The global economies suffered a loss of more than \$4 trillion due to covid. One of the most brutally impacted sectors among all is the aviation sector. The Indian Aviation sector suffered a loss of over INR. 19,564 Cr. and the causa proxima for these losses were suspended operations. The sector is yet to see good days ahead. Increasing Fuel Prices due to the Ukraine war, a Rise in Inflation, Unemployment, Demand Flux, Currency decline, and a slowly looming Recession are making things even worse and hurting the recovery. The Industry must make solid decisions and put robust solutions to address the upcoming challenges. The decisions should also revolve around changes in Operations, Pricing strategies, Revenue models, and Business models. The study assesses five aviation firms, including Indigo, Air India, Spice Jet, Go Air, and Air Asia India. The study endeavours to investigate and comprehend the ramification of Lockdowns and the pandemic in the Sector. The paper also identifies and suggests possible ways to address the issues. The Investigation takes Cash Reserves and Solvency Score (Altman Z Score) to quantify the impact. The sub-variables under consideration in the study comprise - Employee cost, Aircraft's lease, Rent, Interest, Total fixed cost, Total expenditure, Burn rate per day, EBITDA, ROTA, ROE, and ROCE for precise reckoning.

**Keywords:** Covid-19, Aviation Sector, Liquidity, Altman Z Score

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## **A Study on Supply Market Intelligence and Its Usage in Logistics Industries**

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### **Abstract**

In today's world information plays an important role in all sectors of the company either from small companies to large scale companies information plays a crucial role in targeting the customers and their benefit

What is supply market intelligence?

Supply market intelligence is one such thing used in the logistics sector for various purposes it mainly uses the external information that companies use to find and manage the supply of goods and services across the world

Customer satisfaction: Customer satisfaction is crucial in the logistics industry as it plays a key role in the supply chain management as it is growing day by day the market has been steadily increasing day by day as more number of people are opting for online purchase rather than going out for purchase this could be really beneficial for all people and for the industry as well. Involvement of managing the network of interconnected smaller business units, network channels that take part in producing a merchandise of a service package required by the end users or customers.

Conclusion: To conclude with innovation development research offers Supply chain and the market intelligence with various other opportunities to begin with. And also, to be a part of the economy which depends mainly on the trade and logistics of a country which can depend the market value.

Keywords- Business, Satisfaction

## **A Study on Role of Artificial Intelligence in Promoting and Developing the Financial Instrument in Coimbatore City**

*Mr.S. Sudharsan*

*Dr.S. N Selvaraj*

### **Abstract**

Artificial Intelligence (AI) is a quick creating innovation all over the world. The banking sector is one of the primary adopters of Artificial Intelligence (AI) when comparing to other sectors. Banks are investigating and actualizing innovation in different ways. Fake insights are getting way better and more astute day by day. Artificial intelligence could be a cutting-edge innovation that have been Banking sectors insurgency around the world. Owing to more noteworthy acknowledgment of unused innovative developments, fake insights division had been creating at an exceptional pace and is being connected in numerous strolls of life. Counterfeit insights frameworks have potential in changing all operations of banking industry using AI and involved with eagerness due to its capability of taking human-like choices and human-like mistakes. The primary data is required to analyze the issues at hand was collected using survey as a research strategy, the data was collected from 120 bank employees across a few selected banks in Coimbatore city. The main aim of this research is to gather information related to the understanding and implementation of Artificial Intelligence in banking sector and also to be aware of its impact. The data collected was also quantitatively analyzed using SPSS 21.0 software.

**Keywords:** Artificial Intelligence (AI), Bank employees

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## **A Study on acquisition of high-quality talents and effectiveness of freshers during Talent hunt in Frigidity**

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### **Abstract**

Talent acquisition, as a human resource management function, is one among the activities that are compelling on the performance and growth of an organization. While it is understood that ineffective talent decisions and poorly hired talents continue to affect organizational performance and limit of goal achievement. The accomplishment of education is measured by determining the level of knowledge and skills the students exhibit during the time. Acquiring high-quality talent is directed to an organization's success. As the job market increases its competitiveness and the skills grow more diverse, headhunters need to be more selective in their choices, since poor hunting decisions can produce long-term negative effects. This paper

discusses on the expectation on the educational institutions and the proportion of talent exhibited during the Campus drive by Frigidity across Tiers of Colleges in India. It discusses and compares the effectiveness of campus drive practice on the student applicant level with corporates. Based on the results from 300 samples, it discusses about the expectations and the impact faced by corporate during campus hiring on inefficient students.

Keywords- Job Market, Talent Acquisition

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### **Supply Market Intelligence**

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#### **Abstract**

This paper explores the definitions and the functions of Supply Market Intelligence (SMI), importance of procurement market intelligence, sourcing intelligence best in class organizations have embedded supply market intelligence as an integral part of their sourcing process to reduce risk and enhance savings. Here we' ll cover the major role played by Supply Market Intelligence (SMI) in aviation sector, risk factors of not gathering SMI, role of Market Intelligence (MI).

Supply Market Intelligence (SMI) is one of the important factors to consider in managementfield as well as in Aviation sector. We'll take you through the topics purchasing, logistics. In logistics, we cover basic logistics, advantages of using logistics in Aviation. In purchasing, we will study about lowering the costs, reducing risk and ensuring the security of supply chain. We' ll also be including a case study of Akasa Airlines. The main objective of this research is to enhance supply management and to help organization find suppliers who are reliable andperform consistently. It helps to become customer centric, understand the market demands and customer opinions.

**Keywords:** Supply Market, Aviation

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### **Supply Chain Management Sector after Covid 2019**

*Mrs K. Megalatha, Assistant Professor, KSG College of Arts & Science Department of Commerce*

#### **Abstract**

Supply chain management (SCM) is the centralized management of the flow of goods and services and includes all processes that transform raw materials into final products. By managingthe supply chain, companies can cut excess costs and deliver products to the consumer faster and more efficiently. Good supply chain management keeps companies out of the headlines and away from expensive recalls and lawsuits. The five most critical elements of SCM are developing a strategy, sourcing raw materials, production, distribution, and returns. A supply chain manager is tasked with controlling and reducing costs and avoiding supply shortages.

Keywords: Supply Chain Management

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## **Logistics and Operations Management of Mahindra Logistics**

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### **Abstract**

There has been a general arrangement that logistics as well as operations management is a vital research field. This paper sets out the plan or suggestion some hot issues in the current research, through a discuss of related writings from the outlook of operations management. Logistics is generally the detailed organization and implementation of a complex operation. During World War II logistics carried importance in army operations covering the movements of furnish, men and materials. Operation management is an area of administration that deals with businesspractices. It helps to create utmost efficiency in the organization. It involves a set of process like planning, organizing and supervising the tasks transferred out in the organization. Operation management is important to achieve goals and objectives of the company. Operations management helps to create products which can be sold by organization in a systematic and successful manner. In our paper we have covered about logistics and operation management of Mahindra logistics. Mostly through our paper we could say that they ensure optimum productivity and high performance with their operational excellence capabilities. Our paper mainly focuses on brief about their logistics process and their warehouse management system and analysis about their diverse industry verticals and how they have been successful in maintaining their customer relationship.

**Keywords:** Logistics, Operation Management, Customer relationship.

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## **Influence and impact of marketing mix dimensions of higher educationinstitutions Among prospective students in Tamil Nadu.**

*Ms.Monica A, Dr. SNS Rajlakshmi College of Arts and Science*

### **Abstract**

Students studying higher education do select their courses based on various marketing mix dimensions. In this same study we will be elaborately studying the factors that influence the course selection process of students in Tamilnadu. India holds an important place in the global education industry. India is one of the largest networks of higher education institutions in the world. However, there is still a lot of potential for further development in the education system. With 26.31% of India's population in the age group of 0-14 years, India's education sector provides numerous opportunities for growth. (Media reports -DPIIT 2020), With lot of challenges ahead in post pandemic education market it is equally important to understand all the stakeholders' expectations for a successive come back. This study will help to understand the opportunities and strategies to reach the potential target audience by the institutions in Tamil Nadu and ways to attract the right candidates to their institutions. This study results will help to design a customized and personalized cost-effective marketing mix strategies for a new comeback of education institutions. Finally, it will propose a new model for marketing mix for higher education specific to different programs.

**Keywords:** Influence of marketing mix, marketing mix dimensions, higher education institutions, students' perspectives, Diversity

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## Impact on Covid-19 on ALS Sector

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*Mr .Thulasidharan J T, Student of Sri Krishna Arts and Science College*

*Ms.Hanif. F, Student of Sri Krishna Arts and Science College*

### Abstract

Logistics firms, which are involved in the movement, storage, and flow of goods, have been directly affected by the COVID-19 pandemic. As an integral part of value chains, both within and across international borders, logistics firms facilitate trade and commerce and help businesses get their products to customers. Supply chain disruptions to the sector caused by the pandemic could, therefore, impact competitiveness, economic growth, and job creation. The major impact of COVID-19 is on the aviation industry. The resections and lockdowns imposed during the pandemic period threatened the survival of the aviation industries. Restrictive movements, weak tourism, curtailed income, compressed commercial activities are expected to compress the passenger demand from 30 to 60%, endangering the commercial viability of airlines operation. The aim of the paper is to find the impact of COVID-19 in Indian aviation industries and how the aviation industries handled the post COVID-19 situations.

**Keywords:** COVID-19

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## Talent retention of Business Development Executives in selected IT Companies

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*Dr. N. Bargavi, Associate Professor, Bharath Institute of Higher Education & Research, Chennai.*

### Abstract

IT companies are going through a massive talent demand problem across the country for Technology roles which impacts the other roles such as sales and marketing team as well. Talent retention is one of the key factors in the Human Resources Management. Business Development Executives work under the sales function in a company leaves for many of the reasons such as lack of growth in the job role, not having competitive salary package, no exposure in the current job role they are doing and etc., there are lot of studies which have shown and proven that it will be more economical if we retain the staff members of any department in an organization rather than trying to replace them with new costly hires who does not know the ecosystem of the organization. There is a necessity now to explore in the study to investigate the various factors which can affect the retention of the business development executives in selected IT Companies. A qualitative approach was made followed by using semi-structured interviews to collect the various data from the business development executives (N=30) of selected IT Companies in Chennai and the Theme analysis was used.

**Keywords:** Talent Retention, Business Development Executives, HRM, HR Retention

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## **Impact of Supply Chain Management Strategies on Business Performance**

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### **Abstract**

This study sought to determine the impact of supply chain management (SCM) on the operational performance of SMEs in United States, with a focus on organizational skills. A study of 300 manufacturing SMEs in the United States that have used SCM methods was performed. Structural equation modelling was used to investigate the connections between the variables. The research indicates that implementing SCM methods enhances company performance and is linked to competences such as R&D, technology commercialization, manufacturing capacity, and marketing capabilities. As a result, a combination of SCM techniques and organizational skills may help SMEs achieve long-term overall company success. This study findings demonstrate that SCM methods and organizational skills have a substantial impact on overall company success. SCM strategies also have a major impact of SMEs' organizational capabilities. Evaluated the role of organizational skills in moderating the impact of SCM strategy on overall company performance. Higher levels of SCM practices may lead to improved supply chain and company performance, according to this study's findings. It also gives manufacturing company SC managers a multi-dimensional operational assessment of the construct of SCM for evaluating the comprehensiveness of their companies' SCM operations. This study is one of the first SCM studies on the Jordanian manufacturing sector, focusing on the practices that manufacturing companies in the nation must follow to make their supply chains a viable competitive vehicle for growth. The findings have ramifications for all manufacturers, especially in emerging countries where industrial expansion and the creation of integrated supply chains are critical phases in economic development.

**Keywords:** Supply Chain Management, Manufacturing firms, Business Performance

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## **Hrm Practices in Logistics Service Provider Industry**

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### **Abstract**

Due to the continuous changes in external environment, the function of human resource (HR) department in an organization has been evolving from personnel management to strategic human resource management (SHRM). According to the resource-based view of the firm (Barney, 1986,1991, 1995), an organization can achieve sustainability competitive advantage by creating value that is rare and difficult to imitate by competitors. Literature reviews highlighted that the 'changeand' effect of the logistic industry can be addressed by enhancing both the operation efficiency and organizational competencies. The core competencies of the logistic service provider can be created through strategic Human resources management system (HRMS) using the integrated framework proposed by M. Progoulaki and I. Theotokas. A firm exhibits strategic human resource management [SHRM] when the human resource function is vertically aligned with the mission and objectives of the organization and horizontally integrated with other organizational functions. A qualitative case study methodology utilized interviews, documentation and observation was adopted to study the HR practices in a selected logistic provider in Malaysia. The organization has 25 HR practices but still facing failure in aligning the organization structure, collaboration among workers, disciplinary issues, high turnover

rate among the lorry drivers. A strategic human resource management plan with setting up Business Development Department, Business Continuity Plan, Develop Team Synergy, HR “fit” (Vertical & Horizontal) into business strategies and a Human Resource Management Information System (HR MIS as the initiatives was proposed to the management).

**Keywords:** Logistics, Human Resources

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### **Financial Challenges in Logistics and Supply Chain Management Industry**

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#### **Abstract**

The cognitive goal of the article is to systematize the knowledge in the field of Supply Chain Finance (SCF) in the context of the leading contemporary trends and challenges of Supply Chain Management (SCM). For the purposes of the research objective, Walmart was selected for the case study as a model implementation example. In the authors' assessment, there is a need to discuss and organize knowledge about the co-existence of SCF with modern solutions such as sustainable finance or blockchain technology. The empirical goal is to assess the sustainable supply chain finances management (SSCF) in terms of shaping the financial condition of the company and its position on the market.

**Methods:** To achieve the research objective, it was necessary to critically assess the present SCF literature and actual trends implemented in companies, which was done using case study method. The case study form was chosen due to the limited state of knowledge in a research area and the selected company is a precursor in this aspect. The research procedure consisted of: data collection, data analysis, formulating generalizations, confronting the literature, processing of generalizations and study closure.

**Keywords:** supply chain finance, blockchain, sustainable supply chain.

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### **Rise of Entrepreneur in the Times of Pandemic**

*Dr S Sathyakala, Sona College of Technology, Salem*

#### **Abstract**

The COVID-19 pandemic has caused an economic crisis in advanced economies greater than the 2008 economic crisis, as the latest Organisation for Economic Co-operation and Development (OECD) forecasts indicate. Entrepreneurship activity is an important factor to be considered to reduce this negative. The objective of this paper is to analyse the factors that favour entrepreneurship in the COVID-19 pandemic situation and explore the relationship between entrepreneurship and sustainable development. Monetary, fiscal, competitiveness, and business expectations are factors to consider. To achieve this objective, we reviewed the specialized literature and proposed an economic model to verify the relationships between the relevant variables. The estimation of this model uses the Partial Least Squares (PLS) method. This study looks at select OECD countries where data on entrepreneurial activity are available and there are calculations by the OECD for the economic projections for 2020.

**Keywords:** Entrepreneurship, Sustainable development, COVID Pandemic effects, Business expectations, Competitiveness

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## **A Study on Negotiations with Suppliers**

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*Mr. Srinivasan K, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

### **Abstract**

In today's global economy, an ever-increasing number of companies are dealing with international partners, instigating a need to understand the impact of cultural differences on business interactions. Using Hall's distinction of high- and low-context culture, this study investigates the direct and moderating effects of cultural differences in dyadic buyer-supplier negotiations. Theory is developed regarding the impact of culture on joint profits, juxtaposing Transaction Cost Economics and the Relational View. The theory is tested with a negotiation experiment. Participants, classified by their country of origin, negotiate prices and quality levels for three products. This study finds that cultural differences within the negotiation dyad reduce joint profits when compared to dyads of participants with similar cultural backgrounds. Cultural differences also moderate the impact of trust and bargaining strategy on joint profits. Overall, this study concludes that cultural differences, as encountered in day-to-day business interactions in global supply chains, significantly impact negotiation outcomes.

**Keywords:** Buyer-supplier relationship, Negotiation, Cultural differences, Behavioural experiment, Bargaining strategy.

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## **Augmented Reality in Logistics**

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*Dr. Sridhar S, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

### **Abstract**

Augmented reality (AR) has the potential to revolutionize logistics by improving operational efficiency and reducing errors. With AR, warehouse workers can receive real-time information and instructions directly in their field of vision, improving order picking accuracy and speed. Additionally, AR can enhance maintenance and repair operations by overlaying digital instructions on physical equipment, reducing downtime and minimizing errors. As AR technology continues to evolve, logistics companies that adopt it early on will likely gain a significant competitive advantage.

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## **Supply chain disruption due to COVID-19 Pandemic**

*Ms. A. Sharmila, 2<sup>nd</sup> MBA, Rathinam College of Arts and Science, Coimbatore*

*Dr. Mahesh Balakrishnan, Head of the Department, Rathinam College of Arts and Science, Coimbatore*

### **Abstract**

The COVID-19 pandemic has had a profound impact on global supply chains, leading to significant disruptions and challenges for businesses and organizations worldwide. This paper provides an abstract of the main effects of the pandemic on supply chains, including the disruption of transportation and logistics, the closure of factories and warehouses, and the increased demand for essential goods. The paper also discusses the various strategies and approaches that businesses have adopted to mitigate the impact of the pandemic, such as implementing new technologies, diversifying suppliers, and improving risk management. Finally, the paper highlights the importance of resilience

and flexibility in supply chain management and emphasizes the need for organizations to prioritize supply chain risk management in their overall business strategy.

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### **Influence of Risk evaluation as well as Management in Supply Chain**

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*Dr. E. Kamatchi Muthulakshmi, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

#### **Abstract**

Current business trends are leading to complex and dynamic supply chains. Increasing product/service complexity, out-sourcing and globalization are the reasons that have enhanced the risk, changed its location and nature in supply chains. In this present work a review of risk definition, its classification and holistic approach of risk assessment and management have been made. An approach has been developed that help to identify, assess and manage the risks.

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### **Analyse the Various Logistics Operation of Manufacturing Organisation**

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*Dr. Kamachi Muthulakshmi, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

#### **Abstract**

Supply chain refers to the process of converting raw materials into products. Moreover, these products are then delivered to customers. Logistics is a part of supply chain management. It refers to the process of moving the products through the supply chain. Logistics management requires planning, implementing and controlling the supply chain flow. That can be for products, services or even information. At the end, it is all about fulfilling the needs of your customer and your organization. You need to plan, procure and coordinate with your supplier to get those. Moreover, proper movement of the goods and right storage options are crucial. Managing the above refers to supply management and logistics. Moreover, it also includes analysing the condition of the product at every supply stage. This measure is carried out to make sure the customer's needs are met. Manufacturing industries are struggling to keep a hold on the pressure. So, we can simply conclude that a logistics management system is extremely important for manufacturing companies who delivers their product without any 3LPs or 4LPs.

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### **Risk Evaluation and Management Involved in Supply Chain**

*Ms. K. Jothika, 2<sup>nd</sup> MBA, Rathinam College of Arts and Science, Coimbatore*

*Dr. Kamachi Muthulakshmi, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

#### **Abstract**

Supply chains have extended briskly over the time, with the means to increase efficiency, lower costs and fulfil the demands in developing & developed Business Segments. The ever-growing complexity in a supply chain network blocks visibility and therefore decreases one's authority over the process.

Complexity and Deterioration are coming up as significant difficulties in the supply chain risk management. It has become more challenging to point the risks with the rise of third-party service providers, therefore making the process more complex & less visible. This project intends to break down how supply chain risks could be successfully managed. This would be done, first by situating the exploration plan in Supply Chain Risk Management (SCRM). Then, strategic plans for effective administration & control of Supply Chain risk are recognized and analysed.

**Keywords:** Supply Chain, Risk, Management

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### **In-Flight Medical Emergencies**

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*Dr. Mahesh Balakrishnan, Head of the Department, Rathinam College of Arts and Science, Coimbatore*

#### **Abstract**

In-flight medical emergencies (IMEs) are common and occur in a complex environment with limited medical resources. Health care personnel are often asked to assist affected passengers and the flight team, and many have limited experience in this environment.

Flight medical emergencies most commonly involve near-syncope and gastrointestinal, respiratory, and cardiovascular symptoms. Health care professionals can assist during these emergencies as part of a collaborative team involving the flight crew and ground-based physicians.

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### **Digital transformation in supply chain management: leveraging technology for enhanced efficiency and profitability**

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*Ms. Angel Tressa, Assistant Professor, Rathinam College Arts and Science, Coimbatore*

#### **Abstract**

Digital transformation in the supply chain today is one of the most effective and safest ways to build a resilient business. Digitization in supply chain management empowers your planning, sourcing, and logistics teams to collaborate, automate and effectively leverage analytics. It has also proven to drive growth, mitigate risk, and optimize costs. the future of the corporate world lies in the successful adoption and utilization of blockchain, IoT, deep data analytics, and other SCM innovations. Thereby, businesses in the supply chain must delve deep into digital transformation without hesitation.

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### **Risk Evaluation and Management Involved In A Supply Chain**

*Noufal Fouzan M, 2<sup>nd</sup> MBA, Rathinam College of Arts and Science, Coimbatore*

*Mr. Srinivasan, Assistant Professor, Rathinam College Arts and Science, Coimbatore*

#### **Abstract**

Supply chains have expanded rapidly over the decades, with the aim to increase Productivity, lower costs and fulfil demands in emerging markets. The increasing complexity in a



Supply chain hinders visibility and consequently reduces one's control over the process. Cases of disruption such as the ones faced by Ericsson have shown that a risk event occurring at one point of the supply chain can greatly affect other members, when the disruption is not properly controlled. Complexity and disintegration are emerging as major challenges in supply-chain risk Management. It has become more difficult to identify risks as supply-chain operations have fallen into the hands of outside service providers, and are therefore less visible. The risks, their identification and impact depend on the position of the companies in the chain, and on the level of analysis they can carry out. Supply chain management thus faces a pressing need to maintain the expected yields of the system in risk situations. This work provides a review of Definitions and classifications of types of risk; a holistic view of risk assessment and Management is taken here. This project aims to analyse how supply chain risks could be effectively managed. This is done firstly by positioning the research agenda in Supply chain Risk Management (SCRM). Then, methods for effective management of supply chain risk are identified and analysed.

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### **Study on Process Innovation Procurement**

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*Mr. Prakash, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

#### **Abstract**

The study on process innovation procurement investigates the ways in which organizations can improve their procurement processes by implementing innovative strategies. The research focuses on understanding the key factors that influence the success of process innovation in procurement, such as the organizational culture, leadership style, and technology adoption. The study also explores the benefits of process innovation procurement, including increased efficiency, reduced costs, and improved supplier relationships. The findings of this study provide insights and recommendations for organizations seeking to implement process innovation in their procurement practices.

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### **Digital Supply Chain**

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*Mr. S Najumudeen, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

#### **Abstract**

A digital supply chain refers to the use of digital technologies and tools to optimize and streamline the processes involved in the production, delivery, and management of goods and services. This includes the use of technologies such as automation, artificial intelligence, Internet of Things (IoT), cloud computing, and data analytics to enable real-time visibility, coordination, and collaboration among supply chain stakeholders. By leveraging digital supply chain capabilities, organizations can improve efficiency, reduce costs, enhance customer experience, and gain a competitive advantage in the market.

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## **Use of AI and Machine Learning In Logistics**

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*Mr. Chokalingam, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

### **Abstract**

The aim of this paper is to examine the problems in the field of logistics according to problem solving methods. Technology-based problems in the field of logistics, the definition of these problems and the solution of these problems with artificial intelligence techniques are included. The purpose of this paper is to investigate programs and software for using artificial intelligence in logistics and to describe the current problems in logistics. The rapid pace of developments in “Artificial Intelligence” (AI) is providing unprecedented opportunities to enhance the performance of different industries and businesses, including the transport sector. The innovations introduced by AI include highly advanced computational methods that mimic the way the human brain works. The successful application of AI requires a good understanding of the relationships between AI and data on one hand, and transportation system characteristics and variables on the other hand. AI and machine learning in logistics can be a great help when it comes to the supply chain sphere. Using them, it is possible to optimize the processes, avoid mistakes which humans can make or miss, predict future opportunities and challenges. Therefore, make the business itself more successful and profitable.

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## **Implementation Of Green Supply Chain Management**

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*Dr. Sridhar S, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

### **Abstract**

Environmental pollution is the major problem that mankind faces in present state, the major emission of toxic gases is from vehicles and manufacturing industries. The thesis study focuses on three different types of Small-Scale Industries (SSI) in India that are bumper manufacturing industry, dyeing industry and food processing industry. The product life cycles of the process for each industry are identified and their final green waste disposal methods are investigated. The industries are identified with more lean wastes within their product life cycle process. The major green wastes from their disposal methods have high influence on environment. These wastes have to be reduced or eliminated by practicing a suitable supply chain. In present the companies don't practice any supply chain in their organization. The implement of supply chain could reduce the environmental pressures and wastes of the companies to some extent. The lean wastes identified in the process could be eliminated by practicing suitable lean tools and methods. The final disposal wastes are considered to be the green wastes. The method of disposal practiced by the SSIs in India shows evidence of how much they concern towards the environment. The research tries to explain some suitable waste management techniques for the industries and discusses about importance of government role on making these techniques possible.

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### **Evaluation of Technology Using Modern Supply Chain Management.**

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*Ms. Angel Terasa, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

#### **Abstract**

The interest in Supply Chain Management (SCM) related technologies continues to garner interest from a variety of research disciplines. However, the varied disciplines and perspectives from which SCM Technology (SCMT) research arises complicates the efforts of those seeking to develop a comprehensive understanding of the subject. This effort provides a multidisciplinary review of the extant literature and assesses the progress of SCMT research. Using a rigorous content analysis-based approach, multiple reviewers identified and categorised 82 empirical SCMT-related articles appearing in highly rated journals from one of three research fields: Operations Management (OM), logistics and Information Systems (IS). Each of the identified articles was categorised according to the methodology, stage of theoretical development and research focus. The progress of SCMT research within each of these areas is discussed and opportunities for the continued development and extension of the body of knowledge are presented.

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### **An Exploration of Relational Effects of Supply Chain**

*Ms. Joy Mary, 2<sup>nd</sup> MBA, Rathinam College of Arts and Science, Coimbatore*

*Mr. Rahul, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

#### **Abstract**

Recent catastrophic events have disrupted supply chains around the globe, causing practitioners and academics to look more closely at recovery strategies. Recent examinations of supply chain disruptions focus primarily upon the recovery process and its impacts on firm performance. However, less is known about how supply chain disruptions affect business-to-business (B2B) relationships. This study uses interview data from senior supply chain managers to explore how a firm's disruption recovery processes affect supply chain relationships. Results suggest that firms desire supply chain partner participation in the recovery process and value interpersonal characteristics, including honesty, accessibility, and responsiveness.

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### **Parthenian perspective in Supply Chain Management**

*Ms. Shaly R, 2<sup>nd</sup> MBA, Rathinam College of Arts and Science, Coimbatore*

*Ms. Udhaya, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

#### **Abstract**

Parthenium hysterophorus is an aggressive annual herbaceous plant, native to the tropical Americas. It is now widely distributed in a number of tropical and sub-tropical countries threatening natural ecosystems, agro-ecosystems and biodiversity worldwide. It has been considered a great cause of skin allergy in mankind and animals too in many countries around the globe. Parthenium has achieved major weed status in India and Australia and posing a lurking threat to many African and South-Asian countries. Earlier, it was not considered a major threat to agricultural crops in India and other countries, but now, all types of crops are infested with the weed in India. The infestation of this weed causes yield losses up to 40% in several crops and reduces forage production up to 90%. The rapid

spread of Parthenium in India would be a bigger risk to the expansion and sustainable production of many crops, orchards and grassland ecosystems in protected forests. Various management approaches namely cultural, mechanical, chemical and biological have been used to minimize losses caused by this weed, but most of these approaches are ineffective and suffer from one or other limitations. Although management using herbicides and exotic bioagents *Zygogramma bicolor* for biological control has been found to contribute effectively to suppress Parthenium in India, nevertheless, the weed remains a significant problem. Integrated Parthenium Management is advocated to fight against this invincible weed. Hence, an attempt has been made to review its current spread, impact on agriculture, human and animal health and management in context to world in general and India in particular.

**Keywords:** Distribution, Infestation, Integrated management, Menace, Parthenium, Spread.

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### **Implementation of E-Logistics in Supply Chain Operations**

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*Ms. Gayathri, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

#### **Abstract**

This conceptual paper outlines the importance of integration in supply chain management (SCM) by linking the functions of logistics as it applies in strategic business process. Often, business processes are developed at the strategic level but are never identified precisely in logistics or in SCM. Strategic business processes like Customer Relationship Management (CRM), Supplier Relationship Management (SRM), Customer Service Management (CSM) and Demand Management are not directly linked to logistics or SCM. This paper identifies the literature that expressed the importance of integration and how business processes can actually be relevant in the execution of key logistics activities in the supply chain context.

**Keywords:** Integration, Logistics, Supply Chain Management, Business Process

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### **Impact of E-Commerce Growth in the Global Logistics Industry**

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*Ms. Angel Terasa, Assistant Professor, Rathinam College of Arts and Science, Coimbatore*

#### **Abstract**

Logistics management is defined as that part of the supply chain process that plans, implements, and controls the efficient, effective flow and storage of goods, services, and related information from the point of origin to the point of consumption in order to meet customers' requirements. Traditional logistical issues may be amplified by an e-commerce venture. Adopting e-commerce may greatly expand the marketplace. The organization needs to be concerned with its ability to deliver its product to potential customers. Realizing the importance of E-commerce in logistic management, an attempt has been made in this paper to review the existing literature with the objective to gain insights into the impact of E-commerce in logistic management. The advantages of the E-commerce in logistic management are offered. Finally, summary of findings and calculations are presented.

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