# A STUDY ON CURRENT ISSUES AND CHALLENGES IN LOGISTICS MANAGEMENT WITH SPECIAL REFERENCE TO COIMBATORE CITY

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# ABSTRACT

Logistics management is crucial to the distribution of products and services from the point of production to the point of consumption. In a volatile environment, successful supply chain management is essential for survival. The current financial crisis makes it even more crucial. Changes in corporate processes are driven by the world's fast transformation. The two industries with the most changes are logistics and transportation. Analyzing the present logistics and transportation issues in light of the shifting environmental landscape is therefore crucial. This paper focuses on the present problems and obstacles in logistics management, specifically mentioning Coimbatore. This study has employed descriptive research methodology. There was use of both primary and secondary data. A total of 120 respondents made up the study's sample. The convenient sampling approach is applied. Statistical methods such as regression analysis, correlation analysis, ANOVA, percentage analysis, and Chi-Square test analysis are employed. Artificial intelligence and GPS monitoring are already posing new problems to the logistics sector. This study concluded that poor and delayed delivery, infrastructure problems, strategy and decision-making, and departmental coordination are all present in logistics organizations. Logistics businesses should enhance their delivery of new automation techniques and cloud networks for internal and external communication to address these issues.

Keywords: Third-party logistics, risk management strategies, service providers, Supply chain management.

# **INTRODUCTION:**

An element of supply chain management called logistics management is used to efficiently transfer and store products, services, and associated information from the point of origin to the point of destination to satisfy consumer needs. Companies may cut costs and improve customer service by using logistics management. Starting with the gathering of raw materials and ending with the delivery of items to their destination, logistics management is the process. Logistics management makes process strategy, planning, and implementation easier by abiding by industry norms and client demands. The administration of supply chain management operations, or logistics management, aids businesses in organizing, supervising, and executing their logistics and storage plans.

# **OBJECTIVES OF THE STUDY:**

- > To study current issues and challenges in logistics management with special reference to Coimbatore.
- > To analyse the issues and challenges in coordination in logistics management.
- > To obtain suggestions to resolve the issues and challenges in logistics management.

### **Research methodology:**

- **Research design:** Descriptive Research and Analytical Research designs
- Area of the study: Coimbatore city.
- **Sampling technique:** Simple random sampling.
- **Data collection:** Primary and secondary data
- Sample size: 120
- Tools used for analysis: Simple Percentage analysis, ANOVA, and correlation analysis.

#### **Review of literature:**

- 1. **Munim & Schram, (2018),** Another major issue that impacts the transportation and logistics division's infrastructure is local civil instability. The efficiency advantages are lessened in developing nations dealing with political instability concerns, such as the post-election violence that occurred in Kenya during the 2007–2008 election period. When customs processes are inefficient, it impacts transportation and logistics both within the region and between adjacent states. Additionally, the number of cars owned determines the quantity of infrastructure needed to support a certain volume of traffic. The rising ownership of transit vehicles is causing motorization levels to rise in several places. On the other hand, ineffective regulations make it impossible to actively promote mass transportation options that are more economically and environmentally sound.
- 2. **Dufour et al.**, (2018), The absence of cohesive transport laws, rules, and standards within the transport and logistics infrastructure network leads to significant inefficiencies and increased costs associated with commercial transactions in the region. Another issue in developing nations is road safety. In most developing regions, traffic accidents and fatalities are the most common safety concerns. The high number of traffic accidents is a result of both inadequate infrastructure standards and the ineffective application of traffic safety laws. Modernizing infrastructure includes building a central communication port, investing in road terminals, and updating the network of railroads. Infrastructure-related issues that Poland and other nations face include delays in the renovation of the road and rail systems. Inadequate transportation networks, especially those of the road, rail, and port, make warehouse management difficult.
- 3. **Karim et al. (2018),** The three main factors limiting warehouse production are labor output, warehouse exploitation, and inventory consumption. Workplace accidents and misunderstandings brought on by language gaps between local and international employees have a detrimental impact on labor productivity in warehouses. Less sophisticated technology lowers the hourly demand value, which lowers warehouse utilization in the logistics industry. Conversely, inadequate layout design problems lead to a reduction in the amount of surface area designated for inventory storage. The study's conclusions show that the difficulties in warehouse management are comparable to those in other transportation industries. Thus, warehouse productivity dictates how well logistics and transportation are managed.
- 4. **J.Jacobsb et.al (2018),** to conduct a study of the literature on public health planning and interventions during past summer Olympic and Paralympic Games, as well as other pertinent big summer athletic events or large-scale gatherings. Official publications and peer-reviewed studies will be given special attention. The literature listed ten areas for public health planning: surveillance, assessment, and control; infectious disease outbreaks; environmental health and safety; implications of weather, health promotion; travel information; economic assessments; public transportation and fewer asthma episodes; and preparing athletes for potential allergies. Identifying crucial success factors and creating suggestions that enable the best possible use of public health efforts will be made easier with the aid of the literature review.
- 5. Pache, G. Chandes, J. (2019), sIn order to complement the benefits that operations management and commercial logistics approaches have already brought to the field of humanitarian logistics, the goal of this article is to highlight the benefits of adopting the collective strategy model in this context. An example research based on a participant observation methodological technique, pertaining to the Pisco earthquake in Peru, rounds this out. When a "hub" is utilized to ensure responsibility and dependability, the study described in this paper shows that a collective action strategy improves the efficiency of humanitarian supply chains.

| Table showing the age of the respondents    |                     |    |      |  |  |
|---|---------------------|----|------|--|--|
| 1.  | Below 30            | 23 | 19.2 |  |  |
| 2.  | 30-35               | 31 | 25.8 |  |  |
| 3.  | 36-40               | 17 | 14.2 |  |  |
| 4.  | 41-45               | 36 | 30.0 |  |  |
| 5.  | Above 45            | 13 | 10.8 |  |  |
| Table showing the educational qualification |                     |    |      |  |  |
| 1.  | UG                  | 22 | 18.3 |  |  |
| 2.  | PG                  | 33 | 27.5 |  |  |
| 3.  | Diploma             | 54 | 45.0 |  |  |
| 4.  | Professional        | 8  | 6.7  |  |  |
| 5.  | Others              | 3  | 2.5  |  |  |
| Table showing the years in operation        |                     |    |      |  |  |
| 1.  | Below 5 Years       | 72 | 60.0 |  |  |
| 2.  | 5-10 Years          | 31 | 25.8 |  |  |
| 3.  | Above 10 Years      | 17 | 14.2 |  |  |
| Table showing the salary of respondents     |                     |    |      |  |  |
| 1.  | Less than Rs.10,000 | 15 | 12.5 |  |  |
| 2.  | Rs.10,001-15,000    | 26 | 21.7 |  |  |
| 3.  | Rs.15,001-20,000    | 37 | 30.8 |  |  |
| 4.  | Rs.20,000-25,000    | 13 | 10.8 |  |  |
| 5.  | Above Rs.25,000     | 29 | 24.2 |  |  |

# **Table 1: Personal Profile of the Respondents**

### **INTERPRETATION:**

From the above table, the majority of the respondent 30.0% are from the age group of 41-45, 45.0 % of the respondents have educational qualification of Diploma, 60.0% of the respondents who have experience of Below 5 Years and 30.8% of the respondents make a salary from Rs.15,001-20,000.

# ANOVA ANALYSIS

# Null hypothesis (Ho):

There is no significant relationship between years of service on the impact of strategic decision-making in logistics management.

#### Alternative hypothesis (H1):

There is a significant relationship between years of service on the impact of strategic decision-making in logistics management.

| Table 2: Strategic Decision Making |                |     |             |       |      |  |  |
|------------------------------------|----------------|-----|-------------|-------|------|--|--|
|                                    | Sum of Squares | df  | Mean Square | F     | Sig. |  |  |
| Between Groups                     | 43.362         | 2   | 21.681      | 2.910 | .058 |  |  |
| Within Groups                      | 871.630        | 117 | 7.450       |       |      |  |  |
| Total                              | 914.992        | 119 |             |       |      |  |  |

#### **INTERPRETATION**

The table clearly shows that years of service and impact of strategic decision making have a figure of 338.691 values and significance around .058 levels than the sum of squares within the group between group's values have 871.630 and 43.362 respectively. Hence, the significant value is greater than 0.050 for which the significant percentage is below 95%, rejecting the alternative hypothesis. Thus, accepting the null hypothesis i.e., There is no impact of years of service on the impact of strategic decision-making in logistics management.

### **CORRELATION ANALYSIS**

#### Null hypothesis (Ho):

There is no significant relationship between the educational qualifications of the respondents and resources in logistics management.

#### Alternative hypothesis (H1):

There is some significant relationship between the educational qualifications of the respondents and resources in logistics management.

| Table 3 Correlations      |                     |           |                           |  |  |  |
|---------------------------|---------------------|-----------|---------------------------|--|--|--|
|                           |                     | Resources | Educational qualification |  |  |  |
| Resources                 | Pearson Correlation | 1         | 034                       |  |  |  |
|                           | Sig. (2-tailed)     |           | .715                      |  |  |  |
| Educational qualification | Pearson Correlation | 034       | 1                         |  |  |  |
|                           | Sig. (2-tailed)     | .715      |                           |  |  |  |

#### **INTERPRETATION:**

The above table indicates that out of 120 respondents, the coefficient of correlation between e the educational qualification of the respondents and resources is -0.034. It is below 1. So there is a negative relationship between the educational qualifications of the respondents and resources in logistics management.

#### Findings of simple percentage:

From the above table, the majority of the respondent 30.0% are from the age group of 41-45, 45.0 % of the respondents have educational qualification of Diploma, 60.0% of the respondents who have experience of Below 5 Years and 30.8% of the respondents make a salary from Rs.15,001-20,000.

#### **Findings of ANOVA:**

There is a significant positive relationship between the salary of the respondents and the impact on infrastructure.

#### Findings of correlation analysis:

The above table indicates that out of 120 respondents, the coefficient of correlation between e the educational qualification of the respondents and resources is -0.034. It is below 1. So, there is a negative relationship between the educational qualifications of the respondents and resources in logistics management.

# **SUGGESTIONS:**

- ✓ Extend your sourcing options, maybe even regionally, to boost variety and abundance in your supply chain.
- ✓ Building many partnerships with suppliers facilitates flexibility and helps you adapt to a market that is always changing.
- Hedge Companies take a risk by looking for alternate ports in order to complete their orders and fulfill orders on time, especially in the event of unforeseen circumstances or an unexpected surge in client orders.
- ✓ Utilizing automation to compute these variables automatically is the most effective approach to enhance forecasting. To avoid stockouts or inventory shortages, e-commerce merchants always seek to strike a balance between the amount of inventory they have on hand, the cost of holding it, and the demand from their consumers.

# CONCLUSION:

In conclusion, as the logistics industry evolves rapidly with advancements like GPS tracking, AI, blockchain, and drones, companies face the challenge of implementation costs. Partnering with innovative thirdparty firms can help overcome these hurdles, ensuring competitiveness, superior customer service, and increased profitability. To address internal coordination, delivery delays, and resource management issues, embracing advanced automation and cloud networks is crucial for enhancing efficiency and staying ahead in the market.

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