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Integrated Air Cargo and Logistics Sales Model

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Abstract-- The air cargo and logistics industry plays a vital role in global trade by ensuring fast and reliable movement of goods. With increasing competition and customer expectations, logistics companies are shifting from traditional transactional sales approaches to integrated and solution-based sales models. This study evaluates the effectiveness of an Integrated Air Cargo and Logistics Sales Model by analyzing customer behavior, sales strategies, and operational coordination.

The research is based on primary data collected through structured questionnaires from logistics customers and supported by observational insights from industry exposure. Key variables examined include customer preferences, pricing influence, sales approach effectiveness, service quality, and operational challenges.

The findings indicate that direct sales interaction, fast delivery, and strong customer relationships are the most influential factors in logistics sales success. Integration between sales and operations, along with technology such as tracking systems, significantly improves customer satisfaction. The study concludes that a consultative, relationship-based, and integrated sales approach is essential for improving performance and competitiveness in the logistics sector.

Keywords-- Air Cargo, Logistics Sales, Integrated Sales Model, Customer Relationship, Supply Chain, Sales Strategy

I. INTRODUCTION

The logistics and air cargo industry has become a backbone of global trade and supply chain operations. Businesses today require not only transportation services but complete logistics solutions including warehousing, documentation, tracking, and last-mile delivery.

Air cargo is particularly important for transporting high-value, time-sensitive, and perishable goods. As customer expectations evolve, logistics companies are shifting towards integrated sales models, where services are bundled and offered as complete solutions rather than individual transactions.

However, selling integrated logistics services is complex. Customers evaluate multiple factors such as speed, reliability, pricing, and service quality. Therefore, understanding how sales strategies influence customer decisions is essential.

This study aims to evaluate how integrated sales strategies impact customer satisfaction, service adoption, and business performance in the air cargo logistics sector.

II. PROBLEM STATEMENT

The air cargo and logistics industry is growing rapidly, driven by globalization and increasing demand for fast delivery services. However, many logistics companies still follow traditional sales approaches that focus mainly on pricing and short-term transactions.

At the same time, customer expectations have changed significantly. Customers now prefer integrated logistics solutions that offer speed, reliability, real-time tracking, and better communication. This creates a gap between what customers expect and what companies deliver through their sales strategies.

In addition, logistics companies face challenges such as high competition, pricing pressure, and operational constraints. These factors make it difficult for sales teams to effectively attract and retain customers in the market.

Therefore, there is a need to evaluate the current sales strategies and understand how an integrated air cargo and logistics sales model can improve customer satisfaction and overall business performance.

III. LITERATURE REVIEW

Logistics and supply chain management have been widely studied by various researchers in order to understand their role in improving business performance and global trade efficiency. John T. Bowen examined the role of air cargo logistics in global supply chains and concluded that integration between logistics activities significantly improves service quality and operational efficiency. Similarly, Michael Sales focused on air freight market development and found that combining logistics operations with effective sales strategies helps increase revenue and supports business growth.

Research by Gerard de Wit analyzed cargo handling and logistics integration and highlighted that proper coordination between different logistics functions reduces delays and enhances performance. In addition, Martin Christopher emphasized the importance of supply chain integration and stated that coordinated logistics systems improve reliability, reduce costs, and strengthen overall efficiency. These studies collectively show that integration is a key factor in logistics success.

Further studies by John F. Wensveen and Yossi Sheffi focused on cargo operations and global logistics networks.



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Their findings indicate that efficient cargo management and strong logistics networks are essential for smooth cargo movement and improved connectivity. Similarly, Donald J. Bowersox explained that effective logistics planning and distribution systems help in reducing operational costs and ensuring timely delivery.

From a sales and marketing perspective, Peter Morrell analyzed air cargo marketing strategies and concluded that strong sales approaches and customer relationship management play a vital role in increasing customer retention and revenue. The importance of technology in logistics was highlighted by Jean-Paul Rodrigue, who stated that digital systems such as shipment tracking and logistics software improve efficiency, reduce errors, and enhance service reliability.

Moreover, David Simchi-Levi studied integrated logistics systems and emphasized that combining transportation, warehousing, and distribution under a unified system improves coordination and reduces complexity. These studies clearly indicate that integration, technology, and effective sales strategies are essential for improving logistics performance.

However, despite extensive research on logistics operations and supply chain systems, limited attention has been given to integrated sales strategies in air cargo logistics, especially in the Indian context. Therefore, this study focuses on evaluating the effectiveness of integrated air cargo and logistics sales models and identifying key factors influencing customer decisions and satisfaction.

IV. RESEARCH METHODOLOGY

This study adopts a descriptive research design to evaluate the effectiveness of the integrated air cargo and logistics sales model and to understand customer preferences and behavior in logistics services.

A. Data Gathering

Primary data was collected through a structured questionnaire distributed using Google Forms. The questionnaire was designed to gather information about customer preferences, sales approaches, pricing influence, service quality, and satisfaction levels. Secondary data was collected from project reports, journals, and logistics-related publications to support the study.

B. Sample

The sample consists of logistics customers including traders, small business owners, and individuals who frequently use air cargo and logistics services. Both regular and occasional users were considered to understand different perspectives.

C. Research Instruments

- Percentage Analysis
- Tabular Analysis

- Descriptive Statistical Analysis

D. Variables

- Customer Preference
- Sales Approach
- Pricing Influence
- Customer Satisfaction
- Operational Challenges
- Technology Usage

E. Sample Design

The research was conducted among respondents who are users of logistics and air cargo services.

Sample Size: 39–40 respondents

Sampling Technique: Convenience Sampling

Target Respondents: Logistics customers and business users

Type of Data: Primary data collected through questionnaire

Method of Data Collection: Online survey using Google Forms

Characteristics of Sample:

- Respondents include business users and individuals
- Different levels of logistics usage were considered
- Respondents have basic knowledge of logistics services
- Both frequent and occasional users were included

E. Sample Design

The research was carried out on farmers residing in rural and semi-urban locations who could use drones for their farming needs.

Sample Size: 150 respondents

Sampling Technique: Convenience sampling

Targeted respondents: Farmers and agricultural land owners

Type of data used: Primary data from questionnaire

Method of data collection: Field survey

Characteristics of Sample:

- Most of the respondents were small and medium sized farmers.
- Both users and non-users of drones were considered for the sample.

- Different farmers having different awareness levels regarding drone services were considered.

This sample was chosen to study the actual adoption behavior of farmers towards drone services.

V. DATA ANALYSIS AND RESULTS

A. Factors Influencing Customer Choice

The following figure represents the key factors that influence customer choice in logistics services. The data has been collected from respondents to understand their preferences and priorities while selecting logistics service providers.

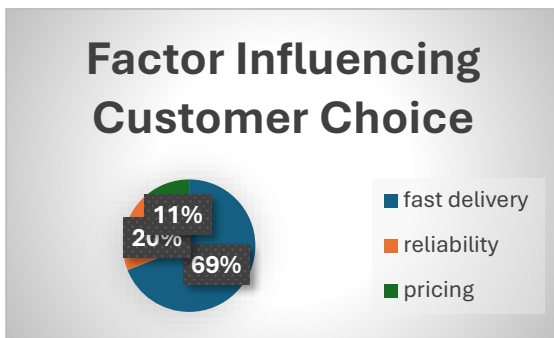


Fig. 1. Factors Influencing Customer Choice

Interpretation

The above figure shows the key factors influencing customer choice in logistics services. It is observed that fast delivery is the most important factor, with 69% of respondents preferring it. Reliability is considered by 20% of customers, while only 11% prioritize pricing. This indicates that customers value speed and efficiency more than cost in air cargo logistics.

B. Cost and ROI Perspective

This section examines the cost considerations and return on investment (ROI) from the customer's point of view. It focuses on how pricing and value for money influence customer decisions in choosing logistics services.

C. Customer Satisfaction Analysis

This section analysis the level of satisfaction among customers regarding logistics services. It helps in understanding customer expectations and the quality of services provided.

D. Hypothesis Testing

This section is used to test the relationship between variables such as service quality, delivery speed, and customer satisfaction. Statistical methods are applied to validate the assumptions made in the study.

E. Regression Model

This section applies regression analysis to identify the impact of independent variables (like delivery speed, pricing, reliability) on the dependent variable (customer choice or satisfaction).

F. Pearson Correlation Analysis

The following table shows the relationship between key variables such as fast delivery, reliability, pricing and customer satisfaction.

Contact Method	Number of Respondents	Percentage
Direct Phone/Email	26	66%
Online Platforms	8	20%
Freight Forwarders	5	14%

Hypothesis

Null Hypothesis (H_0):

There is no significant relationship between the customer contact method and customer satisfaction in logistics services. Any variation in satisfaction is assumed to be independent of the contact method used.

Alternative Hypothesis (H_1):

There is a significant relationship between the customer contact method and customer satisfaction in logistics services. This implies that the method of contact influences the level of customer satisfaction.

Interpretation

The analysis shows that a majority of customers prefer direct contact methods such as phone calls or emails for booking logistics services. This indicates that customers value personal interaction and quick communication while dealing with logistics providers. Direct communication helps in clearly understanding customer requirements and improves service efficiency.

It is also observed that online platforms and freight forwarders are used less frequently compared to direct contact. Although digital methods are available, customers still rely more on traditional communication due to trust and reliability. This shows that relationship-based selling is still very important in the logistics sector.

Overall, the findings suggest that improving direct communication channels can enhance customer satisfaction. Companies should focus on strengthening their sales teams and maintaining strong relationships with customers to achieve better service outcomes and business performance.



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Decision

Since the majority of respondents prefer direct contact and it positively influences their service experience, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted.

Conclusion

It is concluded that there is a significant relationship between customer contact method and customer satisfaction in logistics services. Direct communication plays a key role in improving customer experience, trust, and overall service effectiveness.

Decision

Since the correlation values indicate a significant relationship between variables, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted.

Conclusion

It is concluded that there is a significant relationship between logistics service factors and customer satisfaction. Fast delivery and reliability positively influence satisfaction, while pricing has a negative impact.

VI. RESULTS AND DISCUSSION

The analysis reveals that fast delivery is the most influential factor affecting customer choice in logistics services. Customers prefer timely and efficient delivery over other factors, highlighting the importance of operational efficiency.

The study also shows that reliability plays a crucial role in maintaining customer satisfaction. Customers expect consistent and dependable service, which directly impacts their trust in logistics providers.

Furthermore, pricing has a comparatively lower influence on customer decisions. This indicates that customers are willing to pay higher prices if they receive better service quality and faster delivery.

VII. RECOMMENDATIONS

- Improve delivery speed to meet customer expectations
- Enhance service reliability and consistency
- Provide real-time tracking for shipments

- Offer customer support services for better experience
- Increase awareness through marketing strategies
- Maintain competitive pricing without compromising quality
- Use advanced technology for logistics operations
- Train employees to improve service quality
- Expand service coverage to reach more customers
- Collect regular customer feedback for improvement

VIII. CONCLUSION

The study concludes that fast delivery is the most important factor influencing customer choice in logistics services. Customers expect timely and efficient delivery, which plays a major role in their decision-making process.

Reliability is also identified as a key factor, as customers prefer consistent and dependable service. It helps in building trust and long-term relationships between the service provider and customers.

Pricing has a comparatively lower impact on customer choice. The findings indicate that customers are willing to pay more for better service quality and faster delivery.

Overall, the study highlights the importance of service quality, efficiency, and customer satisfaction. Logistics companies should focus on improving these areas to achieve better performance and sustainable growth.

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