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# An Empirical study on logistic management with respect to Air cargo logistics operations in India

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#### Abstract

Air Freight is an industry that plays an important role in modern logistics because it offers a highly combined and complete facility with safe, fast, reliable, convenient and highly efficient services.

When compared to land and sea transport the air transportation industry is relatively new and has been a tremendous facilitator for economic development in the society. Air cargo is playing an important role in the value chain of global transport and logistics, which in turn attracts cargo market to grow four to five times surpassing passenger's traffic growth in India. The purpose of this article is to particularly focus on air freight handling process with reference to Indian ecosystem by adhering to customer needs and industry standards, logistics management facilitates process strategy, planning and implementation and examines the operational issues which are encountered.

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#### I. Introduction

Air Cargo Logistics play a vital role in the economic development of a nation. Airlines, Air Cargo terminal operators, Ground Handling service providers, Integrated Express Service Providers, Forwarders, Domestic Cargo Transport service providers and Custom House Agents are the key players in the entire Air Cargo supply chain. Thus,the Air Cargo industry presents a wide variety of service providers coming together to move goods both domestically and internationally with a single-minded purpose of faster and efficient delivery. These business entities in Air Cargo logistics industry in turn interact with anumber of cross-border regulatory agencies the principal among them is the Customs establishment. Speedier services in the Air Cargo supply chain facilitate large number of business entities to become more competitive. From the point of view of Airline industry, Air Cargo Services contribute near about 20% of their revenue. India's international AirTrade to GDP ratio has doubled from 4% to 8% in the last twenty years.

## **India's Economic Performance:**

The rate, pattern and structure of the growth of Indian economy have significant implications for the Air Cargo logistics Business in India as these are highly interconnected. Air Cargo growth rates in general are seen to be highly susceptible to the fluctuations in the GDP growth rates of India more so in the international Cargo segment. In fact, the slowdown in cargo seems to be preceding the slowdown of the economic growth in many cases. That is why air cargo sector is known to be the barometer of the economic health of a country. Air Freight is a phenomenal industry and plays a vital role in modernlogistics because it offers a highly integrated and comprehensive fa- cility with safe, fast, reliable, convenient and highly efficient services. When compared to land and sea transport the air transportation in- dustry is relatively younger and has been a tremendous enabler for economic development to societies. The reason is because air freight and integrated air express plays a critical role to time-based strategy

- the primary challenge for the world's most-progressive firms. In ad-dition it offers suppliers and customers more flexibility, and allow for expedited shipments within time-constrained environments.

# **Factors considered while Selecting Air Cargo Transport:**

Air cargo service providers currently offering their global services can be a confusing task. Each service offers something unique to entice clients to choose their company. When trying to decide between a subdivision of a large airline or an express delivery service, there are a few questions that will help you determine which supplier to choose. The following are the factors one should consider while selecting the air cargo transportation.

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Air cargo security

Quality & Customer services offered

Air cargo transporter experience and expertise

Air freight rates and other offerings

Discount/Offer and promotional deals offered

Whether Airlines offers cargo insurance or not

The Role of air freight forwarders

Firstly, will the company act as your freight forwarder? Although itmight seem like an obvious question, not all cargo companies will take care of your paperwork and the logistics of your shipment.

Instead, they might subcontract the work to other delivery services or leave you to deal with all of the logistics yourself.

Secondly, you should find out if the company offers bulk discounts and/or other promotions or deals so that you are paying the best pricepossible for the shipment of your goods.

Next, find out what kind of insurance is offered by the air cargo supplier. If they tell you that you must arrange your own insurancethen you might want to reconsider your options. A good air cargo provider will have their own insurance coverage.

# Some Advantages of Air Transportation:

#### **Speed and Frequency**

The most important factors that a customer will consider are no doubt speed and frequency, especially if he has some urgent shipments. The delivery to certain areas may take several weeks to arrive by ocean and land freight. Time sensitive or perishable goods, such as fresh seafood and flowers, often rely on the air freight.

# Reliability

Owing to the high cost of the airport facilities, these comes a need formaximum utility. As such, the arrival and departure times of flights are highly reliable.

## Warehousing

Using air cargo, the customer has less need for local warehousingand expensive stocks.

### **Suitable Types of Cargo**

The quickest method of sending goods to another country is by air. Apart from limitations on the size of individual consignments and on the carriage of dangerous goods, there are no goods which cannot be carried by air. There are, however, certain types of cargo which are particularly well suited to air freight. These include fresh fruit and flowers, livestock, perishable goods, fashion goods and newspapers; as well as small, high-value items such as diamonds, jewellery and electronic components. Emergency medical supplies or spare parts for a machine breakdown are also ideal for air freight, as time is theprime consideration.

#### **Financial Constraints**

As air cargo is much faster than surface or sea transportation, it can free the capital which would otherwise be tied up in the long transit time for the goods to arrive at the buyer's premises before the payment can be realized by the seller.

# **Insurance Coverage**

More and more users of air cargo services are going for a package of services. In view of this, the carriers have always provided for

insurance coverage on their own where one may declare a "value forcarriage" and then a premium is levied by the carrier in case of eventualities occurring while the goods are in transit to the final destination. Nowadays, many air cargo agents have also undertaken the role of an insurance agent and provides coverage for marine and liabilities risks.

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## **Arranging Customs Clearance**

With the Just in Time (JIT) concept, some users prefer that the goods move from the shipper's door to the consignee's door under one contract, thus the need for the air cargo agents to arrange Customs clearance of cargo.

### Some Disadvantages of Air Transportation

- Airfreight transport is very expensive because of high capitalinvestment and maintenance costs involved.
- ➤ As aircrafts have limited cargo capacity, bulky goods cannot besent.
- > Usually airports are located outside the cities, so road transport has to be arranged to carry the goods to and from the airport. This results in higher costs and wastage of time.
- Bad weather may restrict flights.

#### II. Literature Review

The fast transportation of goods from the point of production or as- sembly to the point of consumption is often facilitated by the air cargoindustry. The air industry developed rapidly in India.

The real starting point for airfreight as a real alternative to other transport modes was after World War II (WWII). There were two main factors that influenced the industry's development, one internal and one external. The internal driver was the technical development of airplanes and other related products during the WWII. Radar equipment and the jet plane are just two examples. The external driver was the consequence of the war, since it exemplified the need for the transports of all kinds of goods. To meet the transport demandeven shipments that were normally moved by sea were transported by air. In order to address this surge in demand new categories of aviation activities such as the charter flights, ad-hoc, and dedicated cargo flights were introduced during that period.

Despite the 'relatively' small share of air freight in global distribution, the significance of air freight as a transportation mode particularly plays an important role for global supply chain management. The huge volume of high-value, time-critical products traversing international boundaries by air annually has resulted in air cargo accounting for 40 per cent of the value of today's India's trade with the world. Air cargo is playing an imperative role in the value chain of global transport and logistics, which in turn attracts cargo market to grow four to five folds by 2020 surpassingpassenger's traffic growth.

#### **Analysis**

- Air transport helped India to participate in the global market by increasing access to main markets and allowing globalization of production.
- Air transport boosts productivity across the global economy- im- proved transport links expand the market in which companies operate. As a result, companies are better able to exploit economies of scale thereby reducing costs, and to specialize in areas of comparative advantage.
- Air transport improves the efficiency of the supply chain, for example, many industries use air transport to shorten delivery times as part of their just-in-time delivery systems, enabling them to deliver products to clients quickly and reliably and to reduce costs.
- Air transport can act as a spur to innovation by encouraging effective networking and collaboration between companies located indifferent parts of the globe.
- Servicing and meeting customers air services allow better contact and more effective communication between buyers and sellers, which contributes to companies making new sales and to meeting the needs of their existing customers.
- It provides fast and reliable delivery of high-value products
- Increasing the range of product markets the development of e- business helps companies identify low-cost suppliers and air transport helps connect buyers and suppliers; improving companies' handling of returns and complaints: Facilitating the development of e-commerce for example, enabling companies to transport online shopping orders quickly and reliably between countries, allowing products to be stored in large warehouses reducing retail and distribution costs.

# What are the problems encountered and how can we overcomethem?

Passengers have to wait for long time to get their check-in-luggage(In civil aviation).

There is still a lot of paper involved when executing the logistics operations. Even though the system of effeight has been introduced ithasn't been properly executed / implemented.

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The goods arriving in damaged condition was another major problem faced. The initial reason for this could be first is the improper packing materials used. Another reason could be the kind of methods in which the goods were loaded onto the aircraft.

Airlines were also facing serious lack of resources. The next problem faced is the warehouse congestions. During heavy demand seasons like summer and shopping festival seasons, the warehouse gets congested leading to a situation of lack of space to accommodate incoming goods. Another reason for the warehouse congestions are the goods that is stored in the warehouse due to incorrect documentation.

Misrouting of high value goods is another problem found out. High value goods are extremely important and if lost or not arrived on timecan lead to huge monetary claims and claims for loss of sale by the customer.

#### III. Recommendations:

In order to reduce the cases of mis-routing of high value commodities, outstations and build up staff must be properly taught and trained the different country codes while entering the information in the system and documents.

To tackle the cases of damaged products, Airline's staff must be thor-oughly trained on loading techniques and they should be extremely vigilant while loading the commodities into the Unit Load Devices.

Airline should consider investing in establishing another warehousefor their cargo.

The company have to implement a collaboration strategy with their counterpart offices in different parts of the world i.e. effective policyand procedures.

The company should cultivate a culture of continuous improvement intheir logistics operations.

### IV. Conclusion

Air cargo transportation and logistics plays a very important role in adeveloping economy like India. It has grown through the years and has seen a surge in demand. It is a major contributor in maintaining a fast, efficient ,and healthy trade relations with other countries of the world. As like any other transportation medium it has it's own drawbacks but by implementing proper measures, companies can overcome them and make use of it's advantages to fullest to provide a very convenient service to customers (Both in Civil aviation and Air Cargo Transportation).

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