

Air freight Management – German Model

Axe : Transport et logistique

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Abstract—Airfreight is an important and growing part of the freight transport activity in the world. It has benefited greatly from the technical evolutions of aircrafts; it is one of the prosperous aeronautical commercial activities.

The goal of this research is to provide a popular model in the air cargo sector.

Lufthansa leads the European sector, so it could inspire national operators like local Airlines. The major proportion of the freight tonnage Lufthansa cargo carries throughout the world is not transported through freighter aircraft but rather through the bellies of passenger aircraft. Another feature is that Lufthansa Cargo is leveraging this airfreight tailwind which saw major forwarders warn shippers to book cargo space early.

Lufthansa guarantees exact time of availability at the destination through defined time frames.

The airline business is marked by high fixed costs, costs that are independent of actual amount of traffic generated, and extremely low costs. The company has appointed new area managers for its Europe and Africa and the Americas regions, as well as a new head of global handling management and she offered loyalty programs with partnerships including: Qatar Airways, Air India. Jet Set blue and Airways India.

Actually technology has enabled shippers to deal directly with carriers and has pushed to the possibility of cutting out the airfreight middleman, means that all prestigious cargo companies are taking steps to prepare for direct engagement with customers.

The market is also changing with the growth of e-commerce, and many operator estimates that in the coming years, most of perishables will be purchased online.

So the issues are heavily taken: how the sector can add value to the modern supply chain? How airports hubs are developing to meet the needs of freighters? And what is the impact of e-commerce on airfreight sector?

So many strategies have to be developed in order to make better the whole sector activity.

This paper research will focus on German experience in airfreight development to put in contrast some solutions for Moroccan Airlines.

Résumé—Le fret aérien est une partie importante et croissante de l'activité de transport de marchandises dans le monde. Il a grandement bénéficié des évolutions techniques des aéronefs; c'est l'une des activités commerciales aéronautiques prospères. Le but de cette recherche est de fournir un modèle populaire dans le secteur du fret aérien. La compagnie aérienne allemande Lufthansa est leader du secteur européen, ce qui pourrait inspirer les opérateurs nationaux comme les compagnies aériennes locales. La majeure partie du fret transporté par Lufthansa dans le monde n'est pas transportée par avion cargo, mais dans les soutes des avions passagers. Une autre caractéristique est que Lufthansa Cargo tire parti de cette tendance qui a vu les principaux transitaires avertir les expéditeurs de réserver le plus tôt possible l'espace de chargement. Lufthansa garantit l'heure exacte de la disponibilité à la destination à travers des



délais définis. L'activité aérienne est marquée par des coûts fixes élevés, des coûts indépendants du volume de trafic généré et des coûts extrêmement bas. La société a nommé de nouveaux directeurs régionaux pour ses régions Europe & Afrique et Amériques, ainsi qu'un nouveau responsable de la gestion globale de la manutention et elle a offert des programmes de fidélisation avec des partenariats tels que: Qatar Airways et Air India.

D'autre part, la technologie a permis aux expéditeurs de traiter directement avec les transporteurs et a poussé à la possibilité de supprimer l'intermédiaire de fret aérien, ce qui signifie que toutes les entreprises de fret prestigieuses prennent des mesures pour préparer l'engagement direct avec les clients. Le marché évolue également avec la croissance du commerce électronique, et de nombreux opérateurs estiment que dans les années à venir, la plupart des produits périssables seront achetés en ligne. Donc, les questions sont largement mise au point: comment le secteur peut ajouter de la valeur à la chaîne d'approvisionnement moderne? Comment les hubs d'aéroports se développent pour répondre aux besoins des compagnies cargo? Et quel est l'impact du commerce électronique sur le secteur du fret aérien?

Keywords—Airfreight Management; Airlines logistics, Cargo carriage by Air; Air Cargo SCM, Logistics; freight transport

I. INTRODUCTION

It goes without saying that logistics is the art of organisation and management of physical operations like Services, flow of goods, and Informations. In addition of is the insurance of giving the customer the right materials at the right time, at the right point, at the right condition, and with the lowest cost.

Airfreight logistic is an important and growing part of the freight transport activity in the world. It has benefited greatly from the technical evolutions of aircrafts; it is one of the prosperous aeronautical commercial activities, an integral part of the

business economic system, the modern, the quickest and the latest addition to the modes of transport in recent years.

The revolution of new technologies has introduced new opportunities for business managers to improve their efficiency. Airfreight sector has benefited also when e-commerce has grown in United States, Asia and Europe, furthermore we start remarking retailers and vendors becoming great Air operators and transporting their shipments by their own Aircrafts. For example airfreight forwarding growth in Germany is thought to have been tough this last couple of years.

This evolution also, is impacted by a tremendous raise in passengers business in all over the world, which created additional capacities and new routes already scheduled. Shippers now have the possibility to choose among a long list of point to point flights not only concentrated in Hubs, but also from and to secondary Airports.

II. AIR FREIGHT FORWARDERS

A. Global freight forwarding activities :

Global Logistics scene have been robust and dominated by a handful airfreight forwarders, the global business practices changed and the supply chain management started gaining ground. The airfreight forwarder helps to overcome obstacles of international trade as a bridge between several actors along transport chain by air. The airfreight forwarders have always been under pressure to find the right balance of specialized matched with the market they want to serve. Airfreight forwarder face new congressional challenges every year to move, products around the globe quickly, cleanly, and without loss, to creating a supply chain with minimal inefficiency and maximum flexibility.

Strategic logistics planning is the only way to developing the airfreight supply chain management: The airfreight forwarder should be:

- Common customs rules, regulations and IATA-FIATA regulations of every country.
- Understanding the associated service parameters costs and Incoterms.
- Demonstrated ability to manage transportation, risk, costs and Analyze Best Shipping Routes, to



establish advantageous transport and delivery terms, to ensuring the acceptance of cargo and special cargo handling.

- Understand and adapt to meet shippers needs and Develop Creative Strategies: Being able to handle any event takes smart planning and strategy to Keep Everything Organized. The objective is cost and time efficiency, with minimum downtime and as few obstacles to delivery as possible

- Using sophisticated online tracking technology and Apply Advanced Systems to Freight Management. Ex Shippers should receive protected system passwords for complete confidentiality, enabling them to access accurate real-time data about shipment location.

- Maintain global capabilities with offices in mega-cities of world commerce.

- Meet professional certification like (ISO 9000 international process quality certification standards).

- Place a premium on safety and security and actively working to ensure that cargo and the public are safe.

- Reduce remaining policy-induced and ensure that ongoing restructuring in the sector is pursued in accordance with the economic and social interested of countries.

The role of airfreight forwarder ultimately consists of generating new demands and business opportunities, specifically when airlines are unable to achieve that efficiently.

RANK	Provider	Gross Revenue (US\$M)	Ocean TEUs	Air Metric Tons
1	DHL	26,105	3,059,000	2,081,000
2	Kuehne + Nagel	20,294	4,053,000	1,304,000
3	DB Schenker	16,746	2,006,000	1,179,000
4	DSV	10,073	1,305,594	574,644
5	Sinotrans	7,046	2,950,800	532,400
6	Panalpina	5,276	1,488,500	921,400
7	Nippon Express	16,976	550,000	705,478
8	Expeditors	6,098	1,044,116	875,914
9	UPS	6,793	600,000	935,300
10	CEVA Logistics	6,646	681,600	421,800
10	GEODIS	6,830	690,000	330,000

RANK	Provider	Gross Revenue (US\$M)	Ocean TEUs	Air Metric Tons
11	Bolloré Logistics	4,670	856,000	569,000
12	Hellmann	3,443	902,260	576,225
14	Yusen Logistics	4,169	633,056	332,389
14	Kerry Logistics	3,097	1,055,600	282,200
15	DACHSER	6,320	481,400**	272,100
16	C.H. Robinson	13,144	485,000	115,000
17	Agility	3,576	513,500	372,700
18	Hitachi Transport System	6,273	430,000	230,000
19	Toll Group	5,822	542,000	114,000
20	Damco	2,500	659,000	190,000
21	XPO Logistics	8,638	131,500	72,300

Fig.1. Top 21 Freight Forwarders 2017 by gross Revenue

B. Air Freight forwarding in Germany

As the leading economic nation in the middle of the European Union, Germany relies heavily on the efficiency of its transport system. It shares borders with nine countries. Which make it a major transit country. The German freight forwarding sector consists of a healthy mix of large companies like DB Schenker and organization like DSV that are global market leaders, who offer smart, competitive and tailor-made solutions to their customers.

DB Schenker is a division of the German rail operator Deutsche Bahn AG that focuses on logistics. They provide comprehensive solutions for air cargo needs with a global network and advanced logistics solutions DB Schenker is a market-leading air freight provider with an extensive, global network. The advanced, integrated shipping solutions ensure cargo transported to destination, anywhere in the world. The DB Schenker air freight network covers 800 locations in 130 countries. The team has a track-record of more than a million tons of successful air cargo deliveries every year. In fact, they are a strong partner to over 700,000 customers. The benefit is a multiple choice of first-class airlines with excellent transportation connections and continuous shipment tracking.

As the top level organization in the logistics services sector over 130 years , the German Association for Freight Forwarding and Logistics

(Deutscher Speditions- und Logistikverband; DSLV) represents some 3,000 businesses with nearly 520,000 employees accounting for around 95 percent of the sector's total sales turnover of EUR 80 billion.

III. E-COMMERCE AND AIRFREIGHT

A. Overview

Over recent years, the air express distribution industry has changed, due in no small part to the role of the fastest growing segment of global logistics and transportation industry e-commerce. The buoyant demands of consumers are increasing than ever before. The fundamental change that e-commerce brings is the increased relevance of consumer choice and give him the express transportation (Fast; Time definite; and Information intensive). The emergence of e-commerce represents a real challenge for the air freight industry. E-commerce has impacted the airfreight industry in many distinct ways.

In one hand with e-commerce, companies can now source for low cost supplies in developing countries and sell in the optimistic market of developed countries. And air express transportation companies are becoming their logistical backbones because they poised to play bigger roles in facilitating the movement of goods in global trade.

Globalization has been accelerated by the Internet, which has resulted in greater competition and greater pressure for companies.

On other hand government initiatives and awareness play a major role in e-commerce adoption, they having the potential to make a positive contribution to e-commerce development. As well as Press, media and e-commerce channel in spreading culture of e-commerce between people. The recent online shopping bonanzas such as 'Singles Day' and 'Black Friday' and 'Cyber Monday', have an direct impact to persuade and brought the consumer.

Direct marketing and direct shipping between countries (cross-trading) and international trade will make sophisticated economic impact on e-commerce.

B. E-commerce in Germany

Germany's E-commerce sector was worth 72.4 billion Euros in 2016, according to the German e-

commerce lobby BEVH. E-commerce accounted for 66.94 billion Euros: 52.74 billion Euros in physical goods and 14.2 billion services.

A number of young German companies, including Zalando, Fab.com and Westwing Home and Living propelled themselves into the national rankings of the 100 largest e-commerce companies. Westwing, a private sales site dedicated to decoration and interior items, founded in 2011, generated nearly 60 million Euros on its first two years of operation. Many of the traders online in Germany are also present at international trade. According to the members of the German Association of Electronic Traders and distance selling, about 90% extend their activity beyond German borders.

IV. LUFTHANSA AIRFREIGHT MANAGEMENT

A. Deutsche Lufthansa Gesellschaft

Lufthansa is an Airline company which wholly an owned subsidiary of the mother company: DEUTSCHE LUFTHANSA AG.

It's the flag carrier of Germany and the largest airline in Europe in terms of overall passengers carried and fleet-size before Ryanair and Air France. In 2010 she was elected according to SKYTRAX the best Air Company and in 2011 the best Air transatlantic company.

Lufthansa has always been a leading airline in international Air traffic; the cargo carrier serves around 300 destinations in approximately 100 countries operating 13 Boeing MD- 11 freighters and 4 Boeing 774-200 freighters. . The company currently employs about 4,600 people, worldwide. In 2016 the airline transported 1.6 millions tones of freight and mail.

The main strategy and the major proportion of the freight tonnage Lufthansa cargo carries throughout the world is not transported through freighter aircraft but rather through the bellies of passenger aircraft. The share of global air cargo carried in passenger aircraft belly holds has increased in recent years because the recent global economic recession had contributed to this trend.

Lufthansa make easy money by offering to fly freight to meet customer demand on time sensitive items. The space to is already available on the plane therefore airlines are making major profit because



the only added expenses are the handling when loading and off loading, and the extra fuel cost of the added weight to the plane. If freight is needed to be delivered to different location choosing belly cargo works well because the company fly the same plane different cities the same day. Therefore, if you need something delivered into 2 or more major cities the airplane only gets loaded once with all the freight and is unloaded as the plane lands into other airports to make connecting flights.

In addition of Lufthansa guarantees exact time of availability at the destination through defined time frames. She has appointed new area managers for its Europe & Africa and the Americas regions, as well as a new head of global handling management. Lufthansa has the right product for every freight she offer customized logistics solutions for even the most challenging of freight consignment: such as the transport of live animals temperature-sensitive pharmaceuticals, cars, several tons of heavy machine party, valuable cargo, mail or dangerous goods. There is a stable growth in the movement of temperature-sensitive cargo in particular. Lufthansa Cargo has invested in special infrastructure at Frankfurt Airport, such as the Frankfurt Animal Lounge and Lufthansa Cargo Cool Center, in order to satisfy the requirements of these sensitive goods.

B. A contrast over Airfreight Sector in Morocco

Compared with Morocco Many aspects as an over capacity which is coming mainly from an expansion passenger business, ultimately after the open sky deal. Obviously, we count nowadays a tremendous number of flights operating from and to National airports and all of which offers an additional payload, this absolutely means an existing unexploited capacity.

According to ONDA “National Airport Authority in Morocco” Airfreight registered during the month of September 2017, a sustained growth rate of 31,99% compared to the same period of the previous year, it reached 6332,20 tons against 4797,45 tons in September 2016.

Air transport is playing comparatively minor role in Morocco’s Freight operations, but the development of support structures for airfreight operations is underway. Therefore we suggest strategic ways to

found strong solutions to improve our local freight operations.

The evolution could be motivated by reorganization of Moroccan airspace, stimulating abandoned airports, creating specialized infrastructures to manage goods such as freight terminals, and Building new air platform for boarding airports, To create new high-tech Airfreight centers for express freight at the four sites of Morocco, Casablanca, Agadir, rabat and Tangier and use them as logistics crossroads for Air Cargo between Europe and Africa, America and Africa and between Asia and Europe. Also, Creation of a training pole in the field of air freight and human resource development; values; skills abilities and motivations; For Airline that established new international Air routes and launched new destinations, the challenge is to optimize those capacities in carrying shipments and goods by offering permanent and clear offers to their customers.

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