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# ORGANIZATIONAL STRUCTURES. FOCUS ON THE AIRLINE SECTOR;

# THE AIR-FRANCE – KLM CARGO REORGANIZATION.

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#### Abstract

Il mio progetto di tesi ha come fine ultimo quello di contestualizzare quanto di teorico è conosciuto in relazione alle strutture organizzative, in un ambito specifico: il settore aeronautico. A seguito del primo capitolo, che assume come scopo quello di riassumere la vasta letteratura teorica delle strutture e i criteri di progettazione organizzativa, la seconda parte è incentrata su una comparazione nella struttura organizzativa di due delle più grandi compagnie aeree del mondo: Lufthansa e Air France - KLM. Entrambe le compagnie adottano macro strutture molto simili, ma i fattori che ne influenzano la struttura sono: la composizione dell'organizzazione a livello di compagnie sussidiarie o alleanze, da una lato e l'importanza che viene data ai sottostanti business segments, dall'altro. Di qui la scelta di analizzare la struttura di una compagnia quale Lufthansa, formata da più di 400 imprese sussidiarie, e Air France – KLM, la quale presenta uno tra i più grandi servizi Cargo al mondo. In conclusione, l'intervista condotta a Ramon Delima, Vice Presidente del settore Variation & Industries del settore Cargo in Air France – KLM, sposta il focus sul progetto di ristrutturazione effettuato all'interno della sua area di competenza nel Luglio 2011, azione che risulta essere una adeguata risposta ai numerosi cambiamenti del mercato. Dalle parole del Vice Presidente, e dall'analisi di documentazione aziendale, emerge che i futuri successi del recente processo di ristrutturazione non saranno dovuti ai soli cambiamenti tecnici nell'organigramma, ma anche all'enfasi posta sulla comunicazione e sulla decentralizzazione del potere per abbattere le difficoltà di una complicata struttura a matrice.

### Keywords

Organizational structure, functional structure, divisional structure, matrix structure, Air France-KLM, Lufthansa, business segments, Cargo, restructuring, re-clustering, communication.

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# Introduction

Before going through the essence of my research paper about the organizational structures in the airline sector, first a definition of company must be provided. According to Caramiello (1993) a company in economic terms is an institution made of a complex system of people and goods, created with the intention to conduct a business, exploiting the opportunities given by the environment, with the final goal of satisfying human needs. Moreover a company has been defined as a "cybernetic system" (Fontana, 2009, p. 137) since it tends to achieve the goals for which it has been created through the coordination of its set of functions. Each function performs an activity, formed by a set of operations, which directly affect capital quantitatively and qualitatively. Similar operations are gathered together to reduce the complexity of the enterprise and to reach the so called "systematic order" (Caramiello, 1993, p. 67), which emphasize the statement that operations must be linked in a system. This is what we call "organizational structure" of a company.

# Chapter 1 : The Organizational Structure; Theories and Models.

# What is meant by Organizational Structure

#### I. Definition

International literature provides us with a huge background full of definitions and studies, trying to theorize the best way of designing an organizational structure. Each one of these definitions according to the author, approaches different influencing factors. For instance, Burns and Stalker (1961) explored the role of the environment and how it matches the organization; furthermore Miller (1989) discovered the relation between strategy and structure, while Handy (1993) discussed the influence of culture on the latter. On the other hand, more recent studies tried to focus on the human resource management giving emphasis to the relationships among members (Mabey, Salaman & Storey 2001), indeed these authors defined the organizational structure as the arrangement of relationships between roles and members in a company.

In my opinion there is not a standard way to design an organizational structure, since:

"there is no logic which says that this horizontal decision sequence needs to be turned into a vertical ladder so that those who take the necessary earlier decision are higher in the hierarchy than those who implement them." (Handy 1993, p.350)

So, including some of the literature backgrounds cited above, I would define the organizational structure as the architectural frame that links together all the aspects and activities of a company, taking into account various influence factors such as: the industry size, the environment, the degree of technology, and culture.

# II. Historical Background

Before the spread of effects brought by the Industrial Revolution in the 18th and 19th centuries, economies were mostly based on handicraft and agricultural industries (most of them were self-employed), churches and armies were the only big partially structured organizations. The positive effects brought up by the Industrial Revolution stimulated investors to set up new firms, which needed to be organized. At the time, the only known form of structure was the one used by the state, where command and control were centralized under the owners' hands that controlled directly the workers, hindering any kind of production process improvement due to the simplicity of the structure. The development of new technologies allowed firms to increase in size, hiring more workers to use machinery, thus the implementation of a more complex structure based on the division of labour and control was necessary. A raising number of inventions extolled the values of the intellect emphasizing the role of rationality, encouraging the first studies over the organizational structures. This lead initially to simple structures made up of few layers and then, with the beginning of the 20th century, to management-oriented company which were based on the division of responsibilities and authorities. The most common structure deriving from these recent studies was the one that placed the CEO on top of the structure and other functions right under, leaving the bottom levels for the operations (Figure no. 1). Nevertheless the aim of this work is the one of providing alternative organizations demonstrating that the latter vertical structure may not be always efficient.

Production Sales Finance Marketing Research & Development

Fig no. 1: Simple vertical structure. Organization chart.

Source: Personal elaboration

# III. Vertical and horizontal links

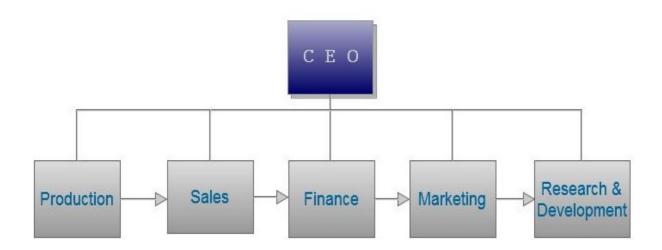
Nowadays the first aim of an efficient organizational structure should be the one of providing an ongoing flow of vertical and horizontal information so to reach the organization's objectives. According to Daft (2007), while vertical links are designed to emphasize the control aspect, horizontal links provide focus on coordination, which implies a reduction in control.

The paradigm depends on which kind of approach the firm is oriented to. For instance preferring a "Vertical Organization", the enterprise puts more emphasis on efficiency, where the decisional process is centralized and problems tend to be solved by the upper part of the hierarchy. In this case the structure seems to lack in flexibility because of the high specialization and division of the different tasks. On the other hand, choosing for "Learning Organization" means preferring the horizontal communication, reducing the strength of hierarchy and the number of rules. In this case the decisional process is informal and decentralized, meaning that the decision making process could also be allocated to the lower levels of the organization.

To stress the difference between the two approaches, Daft (2007) provides different mechanisms to obtain and increase the degree of vertical or horizontal communication. Vertical links are mostly used to coordinate the flow of information and activities between the vertex and the bottom of the organization using mechanisms such as: hierarchical reports, rules and planning and informative vertical systems. If a problem emerges from the bottom part of the hierarchical chain employees are not able and also not supposed to resolve it themselves, so it must be reported to the upper parts of the chart. Once it is solved they convey it to the lower level, for this purpose the vertical lines shown in Figure no. 1 represent the communicational channels used to convey information upward or downward. If same problems are likely to occur repeatedly, the managers may decide to establish a set of rules that make the employees able to operate directly without reporting the issue upward. Moreover with the introduction of informative vertical system the company aims to increase the flow of vertical information encouraging the use of periodical reports or written tasks, and promoting internal communication between managers. Recent studies denounce this design of organization to lack in flexibility because the rigidity of boundaries between lower units hinders any kind of communication among employees.

To overcome this inelasticity, horizontal links refer to the "amount of communication and coordination existing horizontally between organization units" (Daft, 2007).

Fig no. 1.2: Horizontal links



Source: Personal elaboration

The arrows in figure 1.2 represent the horizontal flow of information, thus referring to Daft (2007), it can be enhanced using the following mechanisms: direct connection, task force, full-time integrators and teams. To promote direct links among managers or employees, the direction can either decide to allocate a person in a certain unit and make it responsible in the communication and coordination with another unit, or make sure that people are physically placed close to each other, so to assure direct relationships. Furthermore if the horizontal communication involves a higher number of different units, the direction may find useful to establish a task force, which is a temporary group composed of officers of each unit. They represent the interests of their unit, and gathered together they resolve temporary problems easing the work of the whole organization chart. It is usually not represented in the latter because it dissolves when the issue is solved. In addition a full time integrator (usually known as product, project or brand manager), is a new position or a unit exclusively used to coordinate different units. The organization chart represented in Figure no. 1.3, collocates the integrator (project manager), aside the figure to emphasize that they are separated from the rest of the structure.

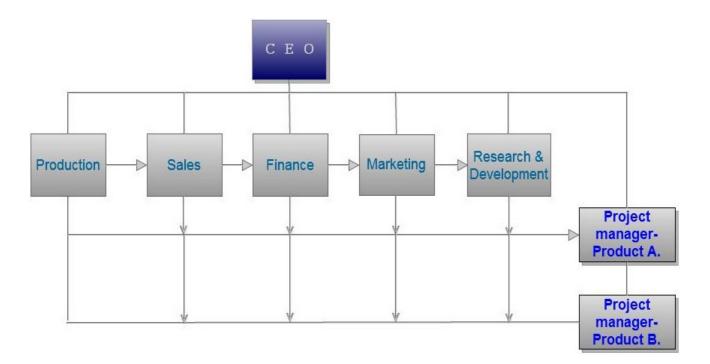


Fig no. 1.3: Full time integrators

Source: Personal elaboration

At the same time the horizontal lines stress that they have no formal control on units; that remains due of the function's managers. They must gather together people, gain their trust, face and resolve problems in the interest of the company. The role of the integrator could also be supported by teams, which are known as permanent task forces. This last mechanism is usually used when the company presents a challenging project, or a new innovation or product to release into the markets.

# Factors that influence the organizational structure planning

What determines organizational structure? As cited above literature provides many different schools. Most believe that factors such as size, environment or technology, influence the company's structure. Theorists argue that each factor can impose certain constraints on companies forcing them to choose predetermined structures over others. To complete our analysis according to Fontana (2009) this work studies how factors such as: industry size, technological degree, environment and culture affect organizational structure.

# I. Industry size

Logically the larger an organization becomes, the more complex would be its structure. On the other hand family-managed business, owned and controlled by the same family member may not even need a formal structure. Usually, in the latter case, since the span of control is reduced, owners can directly control their employees, while they take care of the financial part and selling sector.

But in most of the cases even small-medium business may need a simple organizational chart to rely on.

The increase in the size of the industry is usually flanked by an increase in the complexity of a needed structure. In this case would be harder to manage the whole system without any division of operations and delegation of powers. Thus larger companies must develop a formal frame to dictate works and procedures, and allows flow of information to circulate both vertically and horizontally, to overcome the issue of the overspecialization of the functions. According to Fontana (2009) the most important facet of planning a structure is the capability of managing a compound field such the one of organization. The author writes that managing a company highly depends firstly on the amount of elements that need to be controlled, and secondly on the degree of change in the conditions that characterize the firm. For instance higher is the amount of operations to manage, higher would be the degree of formalization in the structure, leading to a more rigid system less elastic toward changes and restructuring. Also Burns and Stalker (1961) emphasized this issue stressing the gradual transformation of organic systems into mechanical systems. Decentralization and delegation of decision making powers, may be useful instruments to soften this rigidity.

# II. Technological degree

Nowadays technological improvements represent the most common cause of structural changes, since adopting new technologies usually results in production costs reduction and greater efficiency for the firm. Relating to Fontana (2009) products can be divided in two groups. The first one includes products with "mature technology", which production is characterized by slower and standard production processes causing a strict division of the operations and works. On the other hand "high technological" products are backed by more flexible production processes based on high levels of research that aims to make the product the "first in the field".

The impact of technology over the structure has also been studied by Joan Woodward in the early 1970s. She affirmed that an appropriate combination of technology and organization was necessary to determine the business success. After a deep study conducted over more than 100 manufacturing firms she classified the firms in three categories, using as the main criteria the kind of technology. The *small-batch production technology* was used by firms that needed to produce one or few products simultaneously (art works, made-to-order goods...); enterprises using this technology show organic structures. While large-batch or mass production technologies were used by companies responsible for the production of uniform and standardized goods, based on precise procedures (electronic goods, vehicles...). Mass production usually leads company to present a mechanical structure. In conclusion continuous process production is the technology used by capital based firms that require reduced labour involvement because of automated systems (chemical pants, oil refineries). In this last case, companies reflect more organic structures with high focus on management degree. What results from her analysis is that small-batch and continuous technologies lead to a non-routine behavior usually expressed by organic structures, meanwhile mass production technology fits better mechanical structures. In addition she found out that the rise in the degree of technologies increases the hierarchical levels, and that the span of control by supervisors in the first level is wider in mass production technologies rather than in small-batch production. Furthermore continuous process production usually adopts more refined and formalized planning and control systems than other processes, addressing less emphasis to communication flows.

Fontana (2009) provides an alternative point of view regarding the impact of technology on the organization referring to the scholars of the University of Aston. They diverged technological processes in terms of: linkage and interdependence between activities, and continuity of the

production process. The Aston Group assessed that technology just influences the variables that are strictly related to the production processes, while it has less impact with designing an organization especially in large firms. Smaller is the organization larger are the effects cause by the degree of technology; overcome a certain size threshold the impact of technology over organization seems to be less drastic, while the dimension itself assumes importance.

An important contribution also comes from Charles Perrow and his studies which see technology as a determinant of uncertainty in organization. He defines technology as "the action that an individual performs upon an object, with or without the aid of tolls or mechanical devices, in order to make some change in that object" (Perrow, 1967, p. 194). He describes production technologies referring to two different dimensions. The first one is based on the "task of variability", which includes the number of exceptions occurring on the raw materials or on standard procedures; meanwhile with "task of analyzability" is meant the extent of known analytical methods to resolve and deal with exceptions. The combination of these two variables leads us to a 2x2 matrix (shown below).

Task Variability

high
Routine
Engineering

Non-routine

ed on Perrow(1967)

Fig no. 1.4: Perrow's combination of his two dimensions.

Source: Somanagement.blogspot

The Routine activities are the ones characterized by the complete lack of exceptions and the full knowledge over the entire process, including all the manufacturing industries with assembly lines productions process. These kind of industries fit in a more mechanical structure, efficiency-oriented based on vertical links and a strong hierarchical organization.

On the complete other side, the Non-Routine activities are the one constituted by many exceptions and low comprehension of the problems. Issues are frequent and simple solutions are usually not available at the moment. In this case an organic structure would be preferred, employees should be trained to solve unexpected events by themselves to avoid the necessity of conveying problems upward, and wait for a solution. An organic structure based on the decentralization of powers and provided with many horizontal links, results more effective in the latter operations.

#### III. Environment

Many organizational scholars such as Thompson (2003), Simon (1977), Lawrence and Lorsch (1986), provided theories and empirical evidences affirming that a structure reorganizes itself in a way that reacts to environmental changes, thus to a complex environment must be assigned a similar complex structure. With environment we mean the context in which the industry operates, and to keep it simple it can be either stable or dynamic.

A stable environment is defined as the one in which customers' needs and preferences are well known and remain constant. According to Fontana (2009) products with "mature technology" characterize these kind of markets. Competitors compete on price and the incumbents should present a mechanical structure focused on reducing costs of production and constantly monitoring the efficiency in processes.

On the other hand in a dynamic environment costumers' desires are ambiguous and in continuous evolution, technology keeps improving products that affects customers' demand. The turbulence of these markets breeds high level of uncertainty due to the complexity of the context in which the firm operates. Furthermore the pressure given by competitors increases, and so the level of investment necessary to defend the market share. Thus industries need organic structure that allows more flexibility in processing new strategies able to constantly adapt to changes. Horizontal links would be preferred to overcome the rigidity and the overspecialization of a vertical structure, to be more proactive to environmental changes and gain benefits over competitors.

#### IV. Culture

"Culture has been given a wide variety of definitions, but it will be used here to signify the informal shared values, norms, meanings, and behaviors that characterize human society" (Fukuyama, 2001, p. 3130).

This quotation leads us to introduce the concept of organizational culture, which according to Alvesson (1993) is a set of values and beliefs that define the way in which a firm leads its business.

The connection between organization and culture, is most probably indirect; indeed still nowadays modern neoclassical economists tend to bound the influence of culture on the latter assuming that humans are just a-social, rational utility-maximizing individuals.

On the other hand, culture can be seen as a determinate factor on the organizational planning. Zofia Krokosz-Krynke (1998) explained in one of her papers how some of Hofstede's dimensions of culture such as; individualism and collectivism affect some of the dimensions of organizational structure. The dimensions taken into account are:

- the specialization, which gives an idea of what is the division of labour and operation in the firm;

-the standardization, which includes all the rules and procedures predetermined to face eventual unexpected events.

The author suggests that high individualization is linked with a high level of independence, which leads to higher focus on individual responsibilities and generates more specialization inside sectors and less communication between them. In contrast collectivism results in higher delegation of powers and more trust among member groups, finally leading to a higher flow of communication and thus less specialization. In the same exact way individualization also affects standardization because the need of procedures grows with the degree of specialization. Collectivism needs no individual approaches or achievements, and based on group works and responsibilities aggrandize the need of horizontal links and communication.

# **Organization charts: Theoretical Models**

Nowadays, the environment of the firms is characterized by a wide variety of organizational structures; each one uses different alterations to reach advantages over competitors trying to be supported by a more efficient design of structure. The word "structure" according to Perrone (1990), in our analysis, will be described in terms of: basic organizational structure (which includes institutional aspects), operative systems (focused on planning control and evaluation of performances) and distributions of powers and decision making processes.

Nevertheless studies conducted over a wide variety of firms lead us to conclude that the structure of most of them can be reduced to a limited number of basic models:

- The Elementary Structure
- The Functional Structure
- The Modified Functional Structure
- The Divisional Structure
- The Matrix Structure.

# I. The elementary Structure

An elementary approach, as the word suggests, fits just plain firms with simple production processes (Mintzberg, 1979). By plain firm, we also mean enterprises with reduced dimensions, managing a single line of products addressed to customers with same characteristics. Usually we refer to family-managed firms where the investors are the same managers and administrators.

Perrone (1990) states that in these kind of structures labour is organized by technique; operations with similar technical tasks are gathered together, generating for instance departments with same production processes. Usually there are just two different hierarchical levels. At the top level a centralized organ takes care of responsibilities in terms of direction and finance, while the bottom level places the operations. They have no responsibilities and can either be composed in case of division by departments, or simple if placing for instance salesman or specialized workers.

Thus, the structure results: *not formalized* because rarely labour division and charts are under a written form, *transparent* in the simplicity of managing the bottom level, and because of that it results in full concentration of powers at the top level. This organization also lacks in results evaluation systems; the elementary process tends to audit directly people in relation to their behavior,

their attitude during working hours and their trust. Furthermore the above structure allows a single director to perform both economical and direction functions because the number of exceptions is usually non relevant. Moreover the level of specialization tends to be reduced by the limited number of activities and members, which encourages everyone to feel part of the same coordinated process. Furthermore this simplicity allows integration mechanisms which increase the level of personal relations among workers and employers, causing higher homogeneity in goals and achievements. These are the basis for a higher flexibility, which allows this structures to operate profitably in niche markets.

### II. The Functional Structure

The functional model has been theorized by Fayol and it is still the most common structure adopted by firms. In this structure activities are gathered together using the functional criteria, thus the apportionment of responsibilities at the first level follows the main functions of the enterprise. (Fontana & Caroli, 2009)

Production

Finance & Accounting

Marketing

R & D

Advertising

Sales

Fig no. 1.6: *The functional Structure chart.* 

Source: Personal elaboration

This model gains benefits from the high specialization of functions leading to a better exploitation of economies of scale, building a unique plant instead of a plant for each production process. According to Fontana & Caroli (2009), this model appears to be fully efficient under certain constraints. Indeed is necessary that both the environment and the technology results to be stable,

and the industry strategies are mostly focused on developing in existing markets and penetrating new ones. In addition this model definitely fits better when the dimension of the enterprise are small or medium. These constraints are necessary to alleviate the negative aspects of the model. Its rigidity, given by the high level of specialization, makes it weaker under uncertainty. In case of unexpected events occurring at the bottom levels, the system results to be slower than others. Each issue must be delivered upward to the preceding level all the way up to the function directors; causing an overall slow-down and consequentially a non proactive reaction to the environment. The high specialization leads to an insufficient coordination among units that weighs the hierarchy, since the decision making process is accumulated to the top management which may not be able to respond in time.

Fontana (2009) also stresses another limit of the functional criteria. The high specialization hinders communication and global vision of both the production process and the principal aim of the firm. Employees do not feel part of a complex project, resulting in individualism and less motivation to work, while managers focusing on their function are not able to place it in a overall coordinated context. This attitude hinders general improvements and in a dynamic environment contrast the aim of the industry.

The contribute of Daft (2007) over functional structure stresses its strength and weakness elements. To keep it easier and useful; to summarize:

Fig no. 1.7: Strenght and Weakness: The functional Structure.

# **Strenght and Weakness: The Functional Structure.**

# **Strenght elements:**

It exploits economies of scale.

It improves know-how knowledge.

It must be preferred in case of a single product, or few products.

#### Weakness elements

Slow approach to environmental changes.

It makes the structure heavier with the top accumulation of decisions.

It reduces horizontal links.

It shrinks the vision of global aims.

Source: Personal elaboration

To abate the rigidity, and to provide an improved version of the model without completely reform the original; modified functional structure are provided.

### III. The Modified Functional Structure

In the previous section we emphasized that functional structure may not result efficient in a dynamic environment if a firm wants to develop a diversification strategies. Nevertheless to still keep the positive elements of this organization such as the exploiting of economies of scale, it may be not recommended a complete evolution toward a divisional structure. Perrone (1990) evaluates the efficiency of two alternative modified structures: the functional product structure, and the functional project structure.

#### The functional product structure.

This structure differences from its original version because of the introduction of a Product manager, necessary to achieve the diversification objective of developing new lines of products. Functional directors are responsible of managing each phase of the production process (from the transformation to the final distribution), related to a single product or a group of products. As we described above it has no hierarchical powers, even though is the main responsible for the partial economic gains of its own product, for this reason is placed aside the structure. Its position in the chart emphasizes that he is still under the control of the direction but at the same time works horizontally through each function that regards its product. Since it has no traditional hierarchical powers, it has to assure the ongoing flow of information horizontally through the mechanisms previously described (direct contacts, meetings...). In addition to strengthen its position, the uses of marketing plans is recommended, because they predetermine guidelines to guarantee coordination among the functions and with the product manager.

The role of the product manager is usually evaluated by the market share of its products and its economic contribute in the enterprise, moreover other qualities must be audited. For instance a product manager needs to be creative, and good in establishing and maintaining relationships among the controlled members.

Nevertheless, this modified structure may have different cons. Higher coordination requests higher investment in horizontal mechanisms and also more time in training toward a less specialized approach. In addition this structure yields conflict between functions and managers since their

approach to work may be different. In the same way conflicts may arise among product managers for the different allocation of resources, since the firm would decide to invest more on more profitable products.

Our analysis brings us to conclude that, an improvement in the traditional functional structure must be flanked with appropriate mechanisms of horizontal integration to avoid internal conflicts, which can only hinder the general aim of creating value.

Product Manager 2

Product Manager 3

Product Manager 3

Fig no. 1.8: The functional Product Structure chart.

Source: Personal elaboration

### The functional project structure.

In this structure aside the chart, flanking the different functions, project manager are placed. They are temporary directors responsible for the execution of certain projects, which require the help of employees from different functions. Project managers are endowed with temporary hierarchical powers over the members who belong to the project team. According to Norton and Mc Farland (p.520), projects can be classified according to the: the degree of structuring (the way products and process can be determined in advance), the degree of innovation required, and the dimensions of the project in terms of people and financial resources. This kind of structure is usually preferred for complex project which require high technologies and substantial investments, but at the same times generates internal complexity and conflicts, since employees in the group are under the control of both the project manager and the function director. Other conflicts arises between the last two

parties, because both of them may need the same employee full-time; in this case the upper part of the chart must intervene choosing to give more importance to the temporary project or to the functions.

This structure stresses a series of cons, such as; the increase in the cost due to the necessity of horizontal integration systems and the partial lost of inefficiency due to the divisions of work and continuous displacements of employees in different units.

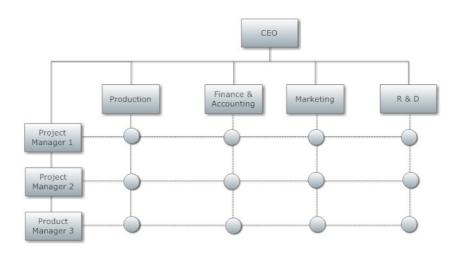
Middleton (1974), provides a simplification of vantages and disadvantages deriving from this structure. Belonging to the first group, the structure brings:

- a better control of the project and a better evaluation of results;
- better relationship with costumers;
- reduction in time to accomplish the project's aim;
- better coordination between units and better quality of the project.

On the other hand, disadvantages may be:

- more complexity of activities;
- less rational use of employees;
- increased difficulty in directing operations
- and high number of displacements among employees.

Fig no. 1.8: The functional Project Structure chart.

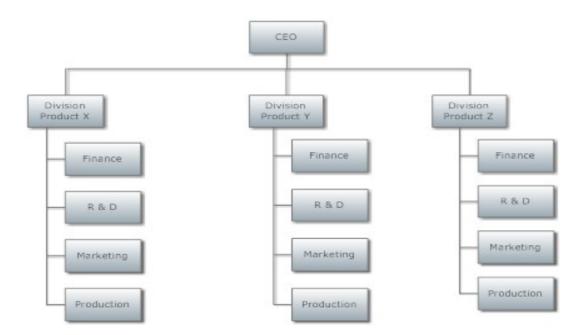


Source: Personal elaboration

#### IV. The Divisional Structure

The divisional structure aims to smooth the rigid boundaries of the functional structure; indeed it better supports diversification strategies with more flexible structures. At the first level of the charts units are no longer organized in functions but in a set of divisions, where each division corresponds to the final product or service provided by the industry. The difference lays on the fact that the grouping is directly done on the final output of the organization. The main difference from the functional approach stands on the fact that each division has its own functions (marketing, R&D, accounting, sales, and so on...).

Fig no. 1.9: The Divisional Structure chart.



Source: Personal elaboration

According to Fontana (2009) the latter structure promotes flexibility and more attitude to change because each division results smaller and it better adapts to a dynamic environment since the decision making process becomes decentralized. It fits better big firms with many different products leading to more satisfaction detected in customers since the responsibilities of each divisions are focalized on a single product or a line of products. Moreover the collaboration between different specialization provides employees opportunities of learning new skills due to a better collaboration between functions in the same division. In case of multinational industries this structure can be

modified following a geographic criteria; it means that each division corresponds to a different area in the world served by the industry (as shown in Fig no. 1.10). It results very useful if the served markets are very different from each other, and for each one of those the production processes and the marketing activities must be different.

CEO America Europe Asia Finance Finance Finance R & D R & D R&D Marketing Marketing Marketing Production Production Production

Fig no. 1.10: The Divisional Structure chart (Geographic Criteria).

Source: Personal elaboration

As every structure also this one presents some cons. Discarding the functional approach, the industry looses the possibility of exploting economies of scale (since bulding plans and structures should be as much as the number of divisions, if processes are very different), thus it may result in a drastic increase in costs. In addition if sufficent horizontal links between product lines division are not provided employees may loose their belonging to the industry not understanding how their contribute is related to organization's objectives. The general direction must guarantee a high level of integration especially if the firm produces smaller product that are part of a bigger production. In this case integration is necessary to sync production avoiding wastes of time, since each division would be focused just on its own production.

# V. The Matrix Structure

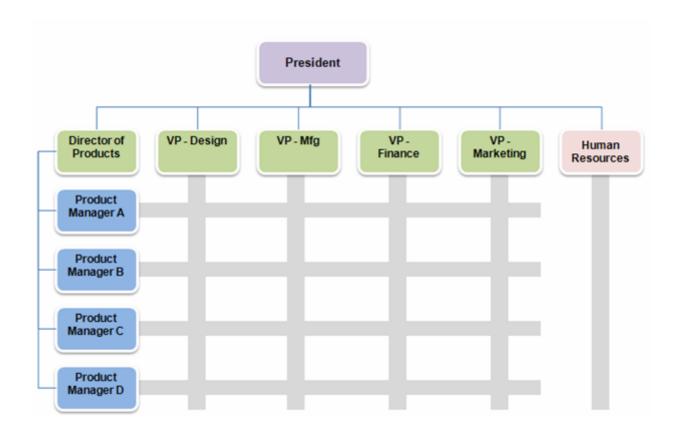
The last structure of our analysis occurs when firms need to focus both on products and functions, or products and geographical areas at the same time. The matrix represents an important mechanism to improve horizontal links and is often used when the market requires the firm to show readiness toward change and innovation but still demonstrating the proper efficiency of a functional structure. If implemented appropriately it provides more proactive reactions to customer's demand changes, and potentially may decrease lead times of new products.

According to Daft (2007), this model gathers together both the functional structure and the product divisional structure, indeed it seems to be similar to the implementation of full-time integrators, but in the general matrix structure product managers are endowed with the same authority assigned to functional managers. The duality of power, which can be seen as a non sense way to organize a structure, works properly if the following conditions are respected:

- A medium size firm with a low number of product lines, which needs to share the available resources among functions (e.g. shared use of machinery and knowledge).
- The environment requires products to be endowed with specific different attributes (e.g. technical and efficiency qualities combined with a high degree of technological innovation).
- The firm operates in a both complex and uncertain environment; high level of coordination is needed and thus vertical and horizontal links are placed on the same level.

Moreover Daft (2007) recognizes two different approaches to the structure; while in the *functional matrix* the functions directors detain the main authority power, in the *product matrix* they are subordinated to the power of the product manager. The double authority facilitates the communication and integration necessary to face the environmental evolutions, and balances the influence on the structure of both directors. It allows the firm to respond to the heterogeneous customer's demand, giving new opportunities of improving the structure and the production processes. Nevertheless as a con, the double authority over employees may generate confusion and conflicts, other than requiring more communication and periodical meetings. It leads to additional costs and more complexity in the management process.

Fig no. 1.11: The Matrix Structure chart.



Source: ExcelTemplates: organizational-chart

# Chapter 2: The Organizational Structure; Focus on the airline industry.

# Lufthansa and Air France KLM; a close look to their macro organization charts.

Lufthansa: The Group as a receipt of success.

Deutsche Lufthansa is a German aviation group and one of the largest airline companies in Europe. The name derives from the combination of two words: "Luft" (which means air in German) and "Hansa" which was a powerful medieval trading group.

According to data retrieved from the International Air Transport Association (IATA), Lufthansa is the world's fourth-largest airline in terms of overall passengers carried, ranked after: Delta Airlines, United Airlines and Southwest airlines.

Fig no. 2: Scheduled passengers carried chart.

	Airline	2011	2010	2009
1	Delta Airlines	163,838,348	162,614,714	161,049,000
2	United Airlines	141,799,000	145,550,000	81,421,000
3	Southwest Airlines	135,274,464	130,948,747	101,339,000
4	Lufthansa	106,335,000	90,173,000	76,543,000
5	American Airlines	106,013,737	105,163,576	85,719,000
6	China Southern Airlines	80,674,800	76,500,000	66,280,000
7	Ryanair	76,400,000	73,553,580	66,503,999
8	Air France- KLM	75,780,000	70,750,000	71,394,000

Source: International Air Transport Association

Moreover with approximately 710 aircrafts, it also has the fourth-largest passenger airline fleet in the world.

Fig no. 2.1: Passengers airline fleet.

Rank	Airline	Fleet size	Sources
1	Delta Airlines	744	"Delta Air Lines- Details and Fleet History"
2	Sky West	727	"SkyWest, Inc. Reports Combined Oct. Traffic"
3	United Airlines	712	"United Airlines - Details and Fleet History - Planespotters.net Just Aviation"
4	Lufthansa	710	"Lufthansa - Flotte"
5	Southwest airlines	700	"Southwest Airlines - Details and Fleet History - Planespotters.net Just Aviation"

Lufthansa was born in 1926 with the merger of Deutsche Aero Lloyd and Junkers Luftverkehr, with the aim of allying with the Chinese government to form the Eurasia Aviation Company and provide the first trans-oceanic transportation service among China and Europe. After the Second World War, the company started to extend the international route network, and only at the beginning of the 1990s, it established new business segments such as:

- Lufthansa Cargo, to provide Cargo transportation services;
- Lufthansa Technik, which was in charge of maintenance and repair overhauling;
- Lufthansa System to manage IT services.

In 1997, a cooperation between Lufthansa, Air Canada, SAS, Thai Airways, and United Airlines formed the Star Alliance which was the world's first multilateral airline grouping. Still today the alliance keeps strengthening the network causing the on-going growth of Lufthansa and its partners. Today the alliance has an handle on 26 airlines offering connection to 1300 destinations in 189 countries; thus coordinating their schedules, the alliance provides benefits to passengers, for instance reducing their overall journey time if changing from an alliance company to another.

According to the annual Report 2010, to perfectly stick to their course, the Lufthansa Group defines it "in terms of sustainable and profitable growth". To do so they provide customers with excellent quality products and services to constantly meet their demand and offering them satisfaction. The base of their success hides behind the solidity and the organization of the whole Group, which structure leads to a contribute of strengths from each segments within the common framework. Composed of more than 400 subsidiaries and associate companies, it results in a strong corporate group able to take advantage of synergies and economies of scale, thus with a well planned communication system a wider spread of knowledge is possible.

This is the receipt of their success and the combination of these elements makes Lufthansa one of the most competitive airlines company in the world.

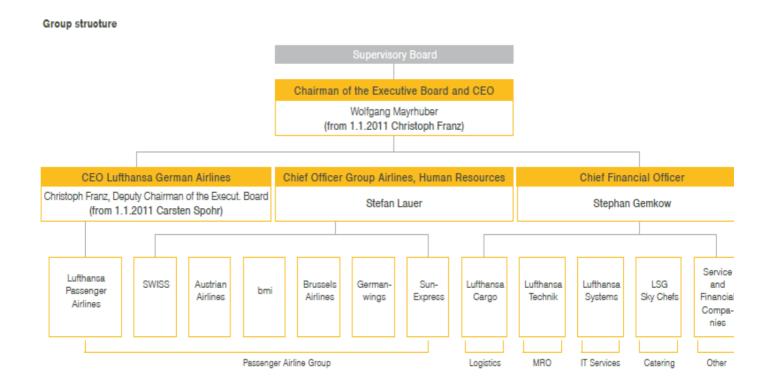
# I. Business activity and Group Structure

To better understand why the receipt of success for Lufthansa is the Group structure, our analysis will be focused on the organization of the company; first dealing with the macro structure and later on focusing on the Cargo sector.

The company operates in the areas of passenger transports, airfreight and airline services; its operations are currently divided in five segments:

- Passengers Airline Group,
- Logistics
- Maintenance, repair and overhaul (M.R.O)
- IT Services and
- Catering

Fig no. 2.2: Lufthansa macro organizational structure chart.

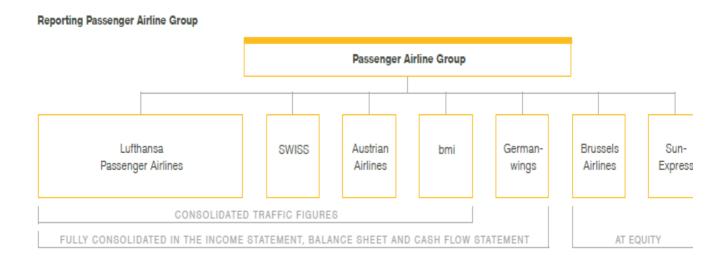


The chart emphasizes a two-tier management and a supervisory structure; where the Executive Board is responsible for managing the company deciding on its strategic moves and leading it to a sustainable increase of value, while the Supervisory Board is in charge of monitoring and advising the latter. Practically the Lufthansa Group is led by four Executive members:

- The Chairman of the Executive Board and CEO, who supervises the operations of:
- The Chief Officer of Lufthansa Passengers airlines
- The Chief Financial Officer, and
- The Chief Officer group airlines and Corporate Human Resource.

Clearly the chart can be divided in two parts. The left hand side includes the Lufthansa Airline Group which acts as a parent company and at the same time is the largest single operating company in the whole Group. It comprehends: Lufthansa Passenger Airlines, SWISS, Austrian Airlines, British Midland, Germanwings, Brussels Airlines and Sun-Express.

Fig no. 2.3: Lufthansa Passenger Airline Group.



With revenues of EUR 20.9 bn, the Passenger Airline Group reaches a share in the whole group revenue of 74%; through a divisional structure approach it realizes significant synergies conveying all the joint efforts of all its members paying attention to the fundamental role of integration. Meanwhile each partner operates individually, to better meet customer's needs and endowing them with profit-making responsibilities.

According to the Annual Report 2010, the Lufthansa Passenger Airlines (first operation on the left hand side of fig. 2.2) is considered as a quality carrier, and its route network covers 206 destinations in 82 countries.

Fig no. 2.4: Lufthansa Passenger Airline structure.



The above structure is the one that has been recently modified (1 April 2011), as a response to the altered market environment. Since the hubs are located in Frankfurt and Munich, this kind of structure results necessary to expedite internal decision-making and management processes, to facilitate the focus on customers and to pursue the divisional strategy followed by the entire Passenger Airline Group.

Swiss International Air Lines (SWISS) has recently celebrated its fifth anniversary of its successful engagement in the Lufthansa Group. It has remained a high autonomous airline and serves 72 destination in 39 countries most of them from its main hub in Zurich. It is the main national airline of Switzerland and it embodies the figure of a high quality airline offering service to both business and leisure travelers. Since 2005 (before the alliance with Lufthansa), the annual passengers number has increased by 50% due to the strong communication link within the Lufthansa Passenger Airline Group (Lufthansa Annual Report 2010).

The third division is the Austrian Airlines AG, which is formed by three airlines and is the leader in the domestic Austrian market and mostly specialized in the regions of Central and Eastern Europe and Middle East. The aim for the company in 2010 was the one of changing the structure to guarantee a better integration within the Lufthansa Passenger Airline Group under the name of Austrian Next Generation Program. The latter aimed on a better exploitation of the synergies within the group, promoting integrated sales activities and cooperation with all the other member companies.

Also British Midland and Germanwings airlines had been successfully integrated in the Lufthansa Airline Group in 2009, thanks to extensive restructuring programs. The British airlines detains its core market network in the UK and its main hub is located in London Heathrow, it guarantees all sort of connection among England and links with the main Europe's cities. On the other side Germanwings gives its positive contribute to the company offering low-cost flights mainly among Germany, and services to stimulate the customer's demand such as the Miles and More initiative.

As we stressed several time, the strategy adopted by the Lufthansa Passenger Group aims to promote coordination among its airline partners, by using a divisional approach necessary not to lack in efficiency and still satisfying customer's needs; thus the Lufthansa Group implemented several restructuring programs in each company to boost the integration process. The entire strategy adopted

by the Group is centered in exploiting synergies within members, so to gain efficiency and savings in costs. Thanks to this approach many business segments such as the MRO, the Logistic, and the IT Service can be realised by common operations among the airlines reducing costs and opening up many opportunities. According to the Annual Report 2010, the following graph shows in millions the forecast amount of money that will be saved thanks to a better exploitation of synergies.

Austrian Airlines

230
Swiss

60
Brussele Airlines

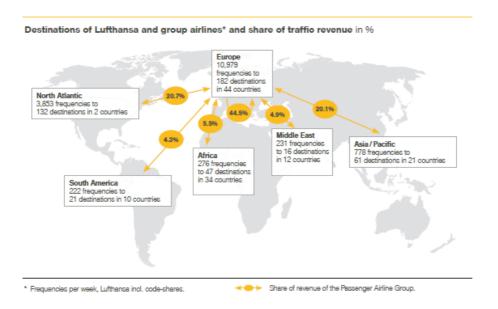
Synergies in the group ourrently forecast in EUR m

Fig no. 2.5: Exploiting synergies within the Group.

Source: Lufthansa Annual Report 2010

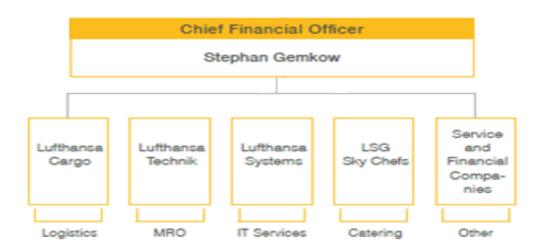
After the acquisition of SWISS, Austrian Airlines, bmi and others airline companies, the divisional structure allowed the company to extend the number of principal hubs, including for instance Zurich, Vienna, Brussels and so on, thus enforcing the route network worldwide, resulting in an increase in competitiveness.





As far as, the right hand side of the structure (Fig. no. 2.2.) is concerned, the structure appears to be less oriented to the previous divisional approach.

Fig no. 2.7: Lurthansa. Righ hand side of the structure.



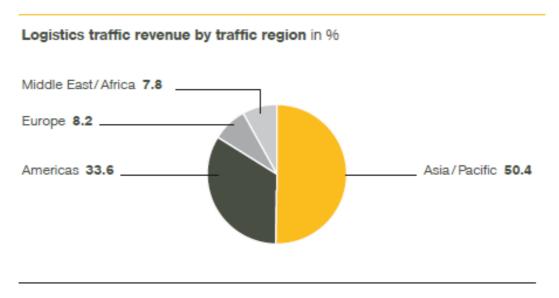
Source: Lufthansa Annual Report 2010

In fact,in this case, the structure can be linked to a simple functional one. The Chief Financial Officer controls five business segments: Logistic, MRO (maintenance, repair and overhaul), IT Services, Catering and Other.

Among the five segments, Logistic results to be the largest one with revenues of EUR 2.8 bn, and a 10.1% share on the Group's profits (Annual report 2010). Lufthansa Cargo is the service provider for the logistic segment in the Group, and its cargo shipments are transported both by aircrafts or trucks; moreover the Special Cargo Agency specializes in the production of special aircrafts for particular freights. The portfolio of this business segment includes products such as: live animals, valuables, airmail, dangerous goods and so on.

It is important to stress that thanks to the acquisition of the airlines companies previously cited, and the exploitation of synergies, new Cargo headquarters have been created, strengthening the trans-Atlantic commerce.

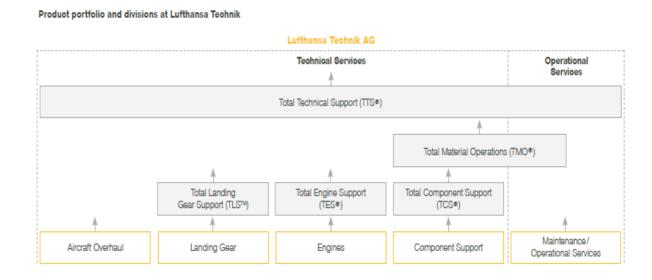
Fig no. 2.8: Logistic traffic revenue.



Source: Lufthansa Annual Report 2010

The MRO business segment provides worldwide repairing and assistance services for civilian commercial aircraft. Lufthansa Technik is the service provider for this segment and it is divided in six divisions: maintenance, aircraft overhaul, engines, component supports, landing gear, and maintenance for VIP aircraft.

Fig no. 2.9: Lufthansa Technik organization.



The third segment regards the IT Service, which offers consultancy and information technology services for selected industries, the service is oriented to more than 200 airlines and companies from other sectors. Lufthansa System is in charge of offering tailored solutions to suit the customer's demand, but also increasing efficiency and cutting costs, for instance through optimizing sales processes or creating online solutions. It has more than 300 customers companies and the two thirds of them are airlines.

Furthermore the LGS Sky Chef segment detains the leadership in the airline catering market, with a global market share of around 30 per cent; the segment consists of 133 companies operating in more than 50 countries. In 2001 Lufthansa acquired Sky Chefs, and after a deep restructuration it started the expansion through developing markets in Asia, Eastern Europe and Africa. In these new markets LSG Sky Chefs is developing (thanks to numerous joint venture agreements, and partnerships sharing) its know-how, thus extending its line of products and services.

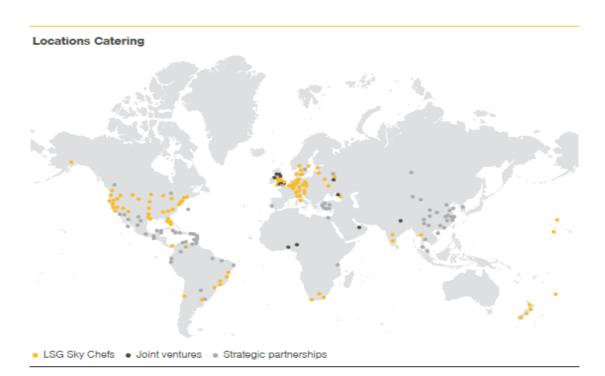


Fig no. 2.10: Lufthansa Locations Catering.

The remaining segment, reported as "Other", includes Services and Financial Companies and the Central Group Functions.

Fig no. 2.11: Lufthansa "Other" Business Segment.



Source: Lufthansa Annual Report 20102

Airplus and Lufthansa Flight Training for instance, are included in the Services and Financial companies; the first one provides solutions for paying and analyzing business travel, enabling

customers to control all travel expenses; while the second provides both simulator and cabin training as a response to the rising demand of the personnel training.

The right hand side structure (Fig. no. 2.2), shows a simple functional organization in contrast to the divisional one shown in the left hand side. In my opinion this contrast emphasizes that the five segments of Fig. no. 2.7 must be common to the entire structure fitting inside the whole Airline Passenger Group; this in order to better exploit synergies, allowing substantial savings in costs and a better response to the market's demand and thus costumer's needs.

### Air France- KLM: Merger is strength.

The Air France-KLM Group is defined as a combined entity between two national airlines: Air-France and Dutch Royal Airlines KLM. Its main activity is the passenger transportation but is also involved in other related activities.

According to data retrieved from the International Air Transport Association (IATA), Air France-KLM is the world's eighth-largest airline in terms of overall passengers carried in the last three years, also ranked after the Lufthansa Group.

Fig no. 2.9: Scheduled passengers carried chart 2009-2011.

	Airline	2011	2010	2009
1	Delta Airlines	163,838,348	162,614,714	161,049,000
2	United Airlines	141,799,000	145,550,000	81,421,000
3	Southwest Airlines	135,274,464	130,948,747	101,339,000
4	Lufthansa	106,335,000	90,173,000	76,543,000
5	American Airlines	106,013,737	105,163,576	85,719,000
6	China Southern Airlines	80,674,800	76,500,000	66,280,000
7	Ryanair	76,400,000	73,553,580	66,503,999
8	Air France- KLM	75,780,000	70,750,000	71,394,000

Source: International Air Transport Association

In September 2003, Air France and KLM publically announced their intention to merger. After the approval of the European Commission in April 2004, the new company was created to be one of the most competitive companies in the airline industry. According to Leo Van Wijk president and CEO of KLM:

"Through this innovative partnership with Air France and our extended participation in the Sky team alliance, we are confident we have secured a sustainable future."

The intention for both companies was the one of guaranteeing a stable future and a competitive position in the airline industry. Thus, the main reason was exploiting synergies and saving costs reaching economies of scale, but in addition relevant was also the aim of optimizing the dual flight schedules and extending the overall route network through the harmonization of the entire organization structure. According to Sparaco (2004), in the merging year the new company operated with 556 aircrafts in 225 destinations and the annual turnover was EU 20 bn, which were optimal results at the time. Moreover both companies would have continued to operate with their separated brands, so not to dissipate their previous established position, using the same main hubs: Paris Charles de Gaulle, and Amsterdam Schipol.

Moreover Air France-KLM, in year 2000, joined as separated companies the Sky Team Alliance which includes other 12 member airlines such as: Air Europa, Alitalia, Delta, China Eastern, and so on. Today, as a merged company, it has an important role within the alliance, which guarantees a better coordination among companies, controlling more than 13000 flights daily to 898 destinations in 169 countries (Air France-KLM company profile).

### I. Business activity and Group Structure

According to the company profile, Air France-KLM results to be a combined entity of the two previous cited companies. The Group's main activity is the passenger transportation, but it also operates in other business activities such as cargo transportations, aeronautics maintenance and other related services.

Thus the Group manages its business through four business divisions: Passenger, Cargo, Engineering & Maintenance and Other.

Air France-KLM Executive Committee

HR & IR

Operations

Flight Ops

Inflight

Operations

Flight
Operations

Flight
Operations

Flight
Operations

Cabin

Aircraft
Maintenance

Catering

Flight
Operations

Flight
Operation

Fig no. 2.10: Air France-KLM macro organizational structure chart.

Source: AF-KL Company

As we can understand from the following graph, which shows the revenues in billions of each segment, the core business is the passenger one, with more than the 75% share within the total company revenue.

Fig no. 2.11: Air France-KLM revenues 2010-2011.

	2010-11  Income/(loss) from current Revenues operations In € billion In € million		
Passenger	18.10	(44)	
Cargo	3.16	69	
Maintenance	1.03	143	
Others	1.32	(46)	

Source: AF-KL Registration Document 2010-2011

Such a wide gap among the segment's revenues is due to the importance that the company gives to the passenger business. According to their last registration document, the firm aims to maintain its leadership position both in the number of destinations served and their share of capacity; indeed the company serves more than 60% of the destinations worldwide, thus it detains a higher market share (13,2%) in relation to its direct competitor Lufthansa (10,6%). (AF-KL Registration Document 2010-2011)

Fig no. 2.11: Air France-KLM destinations offered, No of passengers, revenues, 2010-2011.

	Destinations (Summer season)		passe	No. of passengers (In thousands)		Scheduled passenger revenues (In € million)	
At March 31	2011	2010	2011	2010	2011	2010	
Europe	124	123	48,213	48,492	6,045	5,921	
North America	24	23	6,501	6,835	2,925	2,407	
Latin America	11	11	2,457	2,181	1,475	1,223	
Asia-Pacific	25	22	5,586	5,397	3,070	2,393	
Africa-Middle East	54	50	5,491	5,484	2,541	2,372	
Caribbean- Indian Ocean	16	15	3.072	3,005	1,234	1.173	
Total	254	244	71,320	71,394	17,290	15,489	

Source: AF-KL Registration Document 2010-2011

To obtain such good results, the company worked on a developing strategy enforcing the two main hubs: Schipol and Charles Du Galle.

Indeed, according to the AF-KL Registration Document 2010-2011, the Group's strategy is based on leveraging its power on each region. For instance while in Europe and North America the company keeps reinforcing the hubs through already existing joint-ventures with Delta Airlines and Alitalia; in Latin America, Africa and Asia the firms constantly aims to open new routes and developing partnerships with local Airlines on key markets. To accomplish that, the Group expects to bring into service larger aircrafts, to increase at the same time the number of frequencies and the number of offered destinations; indeed related to Summer 2010, it opened new destinations especially in the Asiatic and African markets, providing direct connection from its two hubs.

The company keeps relying on its two hubs as a fundamental strength to respond to a changing environment, still entrusting them as a key role in the company development. The dual hub system, Amsterdam Schipol and Paris-CDG combination remains unique in Europe, enabling a larger number of frequencies and a more flexible flight schedule. In addition the large size of the hubs, allows the company to exploit economies of scale, using bigger aircrafts that could not operate in smaller hubs.

The Cargo segment is the second bigger business in the company in terms of revenues representing about the 13% share within the Group's revenue. According to the AF-KL Registration Document 2010-2011, its market share among the AEA (Association of European Airlines) amounted to 31,1% confirming its position as a worldwide leader. During the last year it transported 1,5 million tons of cargo of which 66% using passenger's aircrafts and the remaining 33% using the dedicated cargo fleet, always backed by the two powerful hubs (where Paris-CDG ranks number one in the leading European Air Cargo) perfectly organized to deliver the promised benefits to customers. The leading position in the Sky Team Cargo Alliance, added to the acquisition of Martinair and a 25% equity interest in Alitalia, plus the recent joint-venture agreement with Delta, enables the Airline to cover the 25% of the total trans-Atlantic offer. (AF-KL Registration Document 2010-2011)

Fig no. 2.12: Air France-KLM Cargo data 2010-2011.

	Load factor (In %)		No. of tons (In thousands)		Cargo revenues (In € million)	
At March 31	2011 2010		2011	2010	2011	2010
Europe	14.0	14.8	52	56	54	53
North and Latin America	69.7	66.5	557	527	1,133	790
Asia-Pacific	79.2	77.2	535	529	1,051	840
Africa-Middle East	62.6	62.6	289	288	600	476
Caribbean-Indian Ocean	42.1	42.7	59	64	158	154
Total	68.4	66.5	1,492	1,464	2,996	2,313

Source: AF-KL Registration Document 2010-2011

E&M is the Group's third business, which provides assistance both for the company's fleet and third-party customers generating a share of 4% within the total revenue. Aircraft maintenance, engine and components services are the three activities managed by the segment, which increased significantly offering to customers more integrated maintenance solutions. The recent business' strategy aims to reduce costs still maintaining high standards, through the implementation of flight safety initiatives and financing profitable growth developing the global MRO network and adapting resources to the activity growth.

The business named Other comprehends two services offered by the firm: Catering and Leisure services. The first business is completely structured around Servair which is a 97%-owned subsidiary of Air France and the third airline catering in the world; it also provides cleaning services and distribution of magazines and newspapers on board. In addition the company also offers leisure service provided by Transavia and Martinair, where the first one is the low-cost group's subsidiary that transported in the last year 6,5 million passengers. (AF-KL Registration Document 2010-2011)

## Insight: Lufthansa and Air France-KLM; the Cargo Sector.

This part of my research paper aims to provide a close look to the Cargo sector in both companies analyzed above. Indeed both in Lufthansa and Air France-KLM the Cargo sector results to be very profitable as the main segment after the Passenger sector. Moreover, focusing on such a defined segment will help us to better understand the influence of the organizational structure over the Cargo service.

### **Lufthansa Cargo: Networking the World.**

Lufthansa Cargo is a wholly owned subsidiary, self managed company, which controls the logistic segment of the Lufthansa Group focusing mainly on the airport-to-airport business. According to the Lufthansa Cargo Annual Report 2011, the airline transported around 1.9 million tons of freight and mail, serving more than 300 destinations in more than 90 countries, determining a share in the whole group of around 10.2%. Also in this case, the composition of the group and a cooperation-driven approach among alliances and Joint ventures determine the success of the company, making it one of the world's leading cargo airlines.

Composition of Logistics capacity in %

Joint ventures and other chartered freighters 11.8

\_\_\_\_\_ Freight capacity on passenger aircraft 46.6

Fig. no. 3.1: Lufthansa Composition of Logistic Capacity.

Source: Annual Report 2011

Fig. no. 3.1 shows the organization of Lufthansa Cargo in proving its shipment services. To increase the level of performance, the company uses:

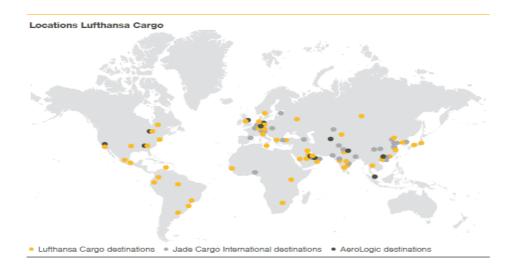
- 18 Boeing MD-11 (fleet capacity of the Cargo sector);
- A road feeder service;
- The available freight capacity on passenger aircraft, and
- Joint ventures in other companies.

With "available freight capacity on passenger aircrafts" is meant the available space in passengers aircrafts in scheduled flights offered mainly by the Lufthansa and Austrian Airlines passengers fleet. Furthermore around 13% of the logistic capacity remains offered by Joint ventures with some of the subsidiary companies of the Lufthansa group:

- Austrian Lufthansa Cargo; mainly responsible for the entire cargo handling operations in Austrian airports,
- bmi Cargo; responsible for routes to Asia, Africa, Europe and Middle East,
- Brussels Airlines Cargo and
- Swiss WorldCargo, which focuses mainly on the transport of high-values goods in more than 80 countries worldwide.

Furthermore, AeroLogic and Jade Cargo International are the two main joint ventures between Lufthansa Cargo and other companies (DHL Express in the first case, and Shenzen Airlines in the latter). According to the Annual Report 2010, the following graph shows the main destinations divided between the two joint companies and Lufthansa Cargo.

 $Fig.\ no.\ 3.2: \textit{Lufthansa Cargo destinations worldwide}.$ 



Source: Annual Report 2010

The 2011 report stresses again the focus for Lufthansa Cargo in developing long term relationships with its partners cited above. To achieve this goal, the "Global Partnership program" has been established with the aim of responding together to the global demand growth in the airfreight market.

Thus, even in the Cargo Structure the organization results crucial, and coordination among function mandatory. Since neither the official website and the annual reports provides us with an organization chart, my goal is trying to design it with the only available info.

The Lufthansa Cargo official web site affirms the segment to be managed by a four-member Executive Board; the Chairman of the Executive Board and CEO, the responsible for Finance and Human Resource, the Executive Board Member Product & Sales, and the Executive Board for Operations. It could be as follows represented:

Fig. no. 3.3: Lufthansa Cargo Organization chart.



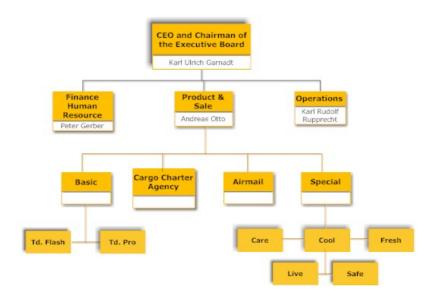
Source: Personal elaboration

Lufthansa Cargo offers to customers a whole variety of products to transport word widely, assuring speed, safety and quality for the transports performance. The company divides the offer in Basic-td and Special Services, plus a specific solution for airmail, and a Cargo Charter Agency; in each of these services the aim of the company consists in optimizing the time of the entire transport process. Indeed Td stands for "time definite"; it means that whatever the customer decided to transport will be available at the destination station at the promised time. According to the Lufthansa Cargo official web-site, this high-quality performance is made possible using specific flight "time

frames", which include the handling, transport and transit time based on the connection between the export and arrival station.

As stated above the whole portfolio of services offered by the company can be gathered in three groups: Basic Td service, Special, Airmail and Cargo Charter Agency.

Fig. no. 3.4: Lufthansa Cargo Organization chart: Products detail.



Source: Personal elaboration

As shown in Fig. no. 3.4, the so called Basic Service includes:

- Td. Flash: The fastest way.
- Td. Pro: The worldwide way.

The first one is an air freight service for airport-to-airport shipments, it mixes speed, high quality and it is the first choice for important and urgent shipments, moreover it has no size or weight limitation. On the other hand the second service is at the same time economic and reliable; it regards standard freights, putting more emphasize on the arrival time, making sure that the shipment will arrive as planned.

In contrast the Special service regards all kind of product which need a particular treatment , care or attention. It includes products as:

- Care Td; which is indicated as the most responsible way to deal with dangerous materials that need to arrive safely and in compliance with the IATA dangerous goods regulations, such as: explosive materials, gases, flammable liquids, and so on...
- Cool Td; it provides reliable service for temperature sensitive goods (medicine, pharmacy substances...). These goods are gathered in: "Cool-Active" for products in specific designed cool containers, "Cool-Passive" for goods already packed in special isolation and "Cool & DG" for temperature sensitive and dangerous substances. In this case the company provides appropriate structures able to keep the products cool, avoiding any abrupt temperature change.
- Fresh Td; regards all kind of perishable goods (flowers, food...), where freshness during the transport is crucial. The company response is in creating a temperature-controlled environment during flight and storage, and training personnel to assure the requested freshness.
- Live Td; in compliance with the requirements of the IATA Live Animal Regulation the service is tailored for whoever needs to ship a living animal with the best possible conditions. Lufthansa Cargo provides an animal station to the care of them during the waiting time, furnished with all the necessary equipment. In addition during the flight, trained staff constantly monitors them to be ready to warn veterinarians in case of irregularities.
- Safe Td; this remains the only solution for shipments of special value goods (diamonds, jewelry, banknotes...). The Cargo segment is endowed with particular containers and cargo boxes which are all protected with approved seals, to make sure that they remain locked until destination. The employees are in charge of constantly monitoring the valuable boxes until the compartment is closed. Both the appropriate equipment and the trained personnel make the service fully reliable on.

An additional service regards the Airmail. The combination of the strong network with more than 200 international postal companies, and the high number of destinations, delivers to costumers maximum efficiency as response to their demand; this efficiency is due to modern mail tracking systems and numerous partners all around the world.

In conclusion Lufthansa Cargo, also offers a service to meet particular costumers' needs which cannot be solved in case the standard procedures do not match the request. The Cargo Charter Agency Service gives the costumer the chance to book any kind of aircraft, deciding any time of

departure and arrival, splitting the capacity of a charter with other costumers, and at the end find the most convenient solution for the client which has particular needs.

Nevertheless as we stated at the beginning of the chapter, even the Cargo segment puts efforts on organizing the structure so to increase the level of communication to better reach costumers' demand. Indeed we saw that Lufthansa Cargo encompasses a relevant number of related companies to enforce the route network, and increase the portfolio of products. Thus even though the official web-site does not furnish an organization structure, in my opinion the last self made chart must be improved with the introduction of a divisional part, related to each of the partners companies.

CEO and Chairman of the Executive Board Karl Ulrich Garnadt Finance Product & Operations Human Sale Karl Rudolf Rupprecht Andreas Otto Lufthansa AereoLogic Cargo AG bmi Cargo Internationa Lufthansa Cargo SWISS Cargo Charter WorldCargo Agency Cargo Charter Basic Special Agency Fresh Td. Flash

Fig. no. 3.5: Lufthansa Cargo Organization chart: Partner Companies & Products.

Source: Personal elaboration

The above self made graph, shows that the divisions are represented by each partner company; moreover each one of these detains the portfolio of services and products described above. In this way, assuring a high level of coordination among divisions, the Lufthansa Cargo manages to maintain the efficiency of a functional structure, and at the same time the flexibility offered by a divisional approach.

### Air France-KLM Cargo: Deliver a promise.

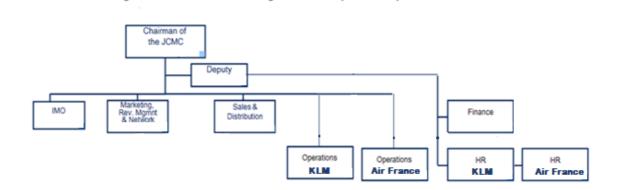
Air France-KLM Cargo is the dedicated segment in the Air France-KLM Group, which provides logistic and freight services in the market. Since 2008 Air France-KLM became the only shareholder of Martinair Cargo, their cooperation intensified and nowadays their joined forces provide one of the most efficient cargo service in the market. According to its official web-site, AF-KL Cargo, with a combined turnover of EUR 2.9 bn is one of the largest Cargo company in the world, thus it offers a variety of transport services through worldwide connection between more than 350 destinations, in 175 countries with a 20 cargo aircraft fleet.

As stated in the company profile, its mission consists in delivering to costumers access to the world offering an extensive route network, in total quality and reliability through the development of operations regarding the logistic chain; all is offered "making life easier to the consumer", through the development of easy online booking services. To assure its role of customer-driven company, according to the website more than 150 Cargo offices worldwide are available, with personnel trained on purpose to deliver what the company promises.

To show how practically the company manages to deliver its promises to consumers, we start from analyzing its organization chart.

Fig. no. 3.6: AF-KL Cargo Organization chart: First Level.

Organizational Structure Cargo Business (functional)



Source: AF-KL Cargo sector.

IMO, Marketing Rev. Management & Network, Sales & Distribution, Finance, Operations and Human Resource, are the functions shown in the first level of the above organization chart.

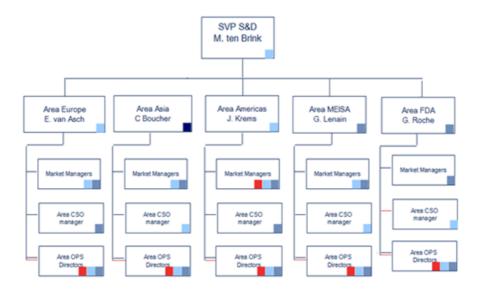
As we demonstrated in the previous chapter of this work, opting for a functional structure means gathering together activities, through an apportionment of responsibilities according to the main functions of the enterprise. Thus the company results to be better organized, exploiting maximum efficiency and taking all the advantages deriving from the high specialization, developed in each function.

Nevertheless this structure may presents many cons, especially in a complex environment such the one of the airline cargo industry. Uncertainty, heterogeneous demand, not stable environment, high competitiveness, are real key aspects that may hinder the functioning of such a structure.

Under these constraints, a functional approach should not be developed through the whole structure; high specialization leads to an insufficient coordination among units that weighs the hierarchy, since the decision making process is accumulated to the top management which may not be able to respond in time. Indeed in cases of unexpected events, a complete functional system results to be slower than others; each issue must be delivered upward to the preceding levels causing an overall slow-down and consequentially a non proactive reaction to the dynamic environment.

To avoid such a rigid approach, the study case company combines the efficiency deriving from a functional approach with the total flexibility of a divisional approach. To demonstrate this, and to keep our analysis narrowed to the products and services offered by the AF-KL Cargo segment, we provide the second level organization chart of the Sales & Distribution function.

Fig. no. 3.7: AF-KL Cargo sector Organization chart. Second Level: Sales & Distribution. Divisional Approach.



Source: AF-KL Cargo sector

Even though Fig. no. 3.7 does not represent the real function structure, we will use this one as an example to better understand their divisional approach toward the different geographical markets.

As stated above a divisional approach aims to smooth the rigid boundaries of the functional structure; each division results smaller and it better adapts to a dynamic environment since the decision making process becomes decentralized. Indeed in this case each area is endowed with its main functions, thus issues and decision making processes of the functions are directly delegated to the managers of each geographical areas.

The criteria divides the areas and gathers together the closest geographical regions, thus it divides, for instance: Area Europe, which includes: Germany & Austria, Benelux, Italy & Switzerland, Nordic regions, Eastern Europe, and Spain;

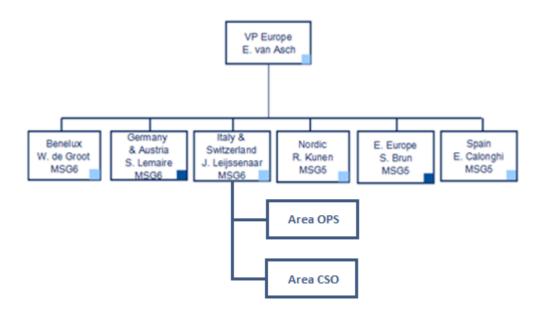


Fig. no. 3.8: AF-KL Cargo sector Organization chart. Third Level: Area Europe.

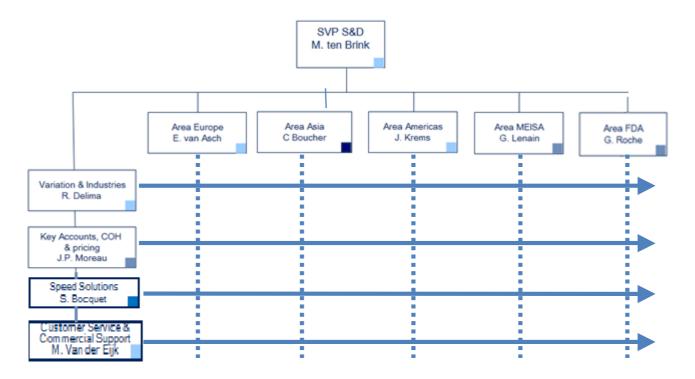
Source: AF-KL Cargo sector.

The same structure is used for the other Geographical divisions; Asia, Americas, MEISA and FDA. To keep the proper flexibility of the divisional structure, and to ensure specialization given from a functional approach, each division comprehends the Customer Service Organization and the Operations area, which managers relate directly to the geographical area manager.

The latter approach makes the Sales & Distribution function work properly focusing on each geographic area, but there is still something that could be improved. Since it lacks in the possibilities of exploiting economies of scale and synergies, and requires numerous integration efforts so to guarantee communication among geographic areas, the company combines it with the positive effects deriving from a matrix approach.

Fig. no. 3.9: AF-KL Cargo sector.Organization chart. Second Level: Sales & Distribution. Matrix Approach.

# Integrated S&D Organization



Source: AF-KL Cargo sector

Now the best solution has been implemented. The complexity of the environments perfectly fits the mix of efficiency and flexibility of a matrix structure. Each geographical division masters its operations narrowing the tasks of each functions to the precise area. Moreover the aim of the left hand side functions results necessary to increase communication, and to guarantee an adequate level of coordination through the divisions. They interact horizontally, providing an ongoing flow of information, keeping the divisions as part of the entire system, rather than individual operators; indeed geographic areas may loose their belonging to the industry, focusing on their tasks and objectives diverging from the mission of the entire company.

To conclude our analysis, and to make it comparable to the Lufthansa Cargo case, it may result helpful to analyze the structure of one of three side functions of the chart: Variation and Industries. It includes all the product carried and the services offered by the company.

According to the AF-KL Cargo official web-site, to deliver its promise and to be considered as a customer-oriented company, the company provides five type of tailored solutions for its customers: Equation, Cohesion, Dimension, Mail service and Variation.

The first one, is the solution offered for urgent shipment which guarantees the product to be at its destination in the shortest time possible. This kind of service is specialized on finding the fastest ways to ship products, combining connection among flights, and always finding the best solutions constantly analyzing flight schedules.

Cohesion is the service offered for who is willing to pay more, but requests a solution designed on its needs. Adopting this option, a dedicated team offers advices and suggestions, regarding the possible ways to customize each phase, from the contracting to the final invoicing and payment.

Dimension is the general Cargo solution, which offers base quality and competitive prices, while the Mail service offers different solutions according to the complexity of the needs when sending the envelope.

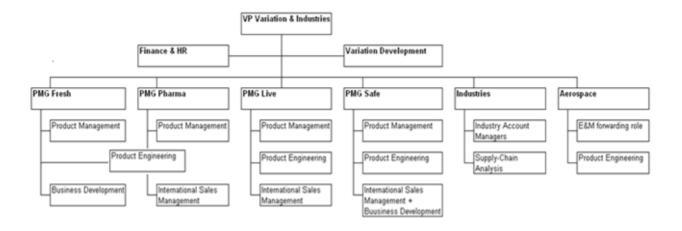
The last offered service is the one which includes shipments of goods which require particular care or standardized treatments. As defined in the web site, Variation is the most reliable way of transporting an outsize, unusual, or valuable product, thus it includes a whole portfolio of products managed by the entire segment. Indeed it includes the shipment of:

- Variation Aerospace, for products like: engines, helicopters, landing gears and so on.
   Each phase is monitored by dedicated and experienced staff, which notifies eventual discrepancies or directly applies corrective actions on time.
- Variation Art, for all types of artworks, antiques and musical instruments. It guarantees the maximum security with specialized loading procedures and apposite area storages.
- Variation Big, which provides the right system for oversized and heavy products.
- Variation DGR, for dangerous goods (explosive, gases, flammables...) to safely reach their destination. The company treats dangerous goods according to the IATA normative, guaranteeing constant monitoring and extra care handling.
- Variation Fashion, which takes care of fashion collections and clothes, with special containers endowed with specialized bar-hangings packing solutions.
- Variation Fresh, tailored for perishable goods which needs to be kept cool. Also in this
  case the company offers three different solutions in relation to the degree of
  temperature requested, providing different kind of containers and procedures.

- Variation Live, when a special care is needed for transporting live animals rather than
  regular Cargo. This service ensures the maximum safety, comfort and hygiene for all
  kind of animals, transporting them in comfortable and climate-controlled cabins, and
  guaranteeing the best accommodation through the special animal hotel in Amsterdam
  Schipol Airport.
- Variation Pharma, is the safe solution for temperature-sensitive shipments, such as pills serums and so on... Also for this service the company provides different containers and shipment treatments according to different temperature requests. Moreover constantly monitoring each phase of the transportation, the service guarantees arrivals in safest conditions.
- Variation Safe, for both valuables and extremely fragile "new" valuables (microchips, cameras, high-tech products...). In both cases security is guaranteed through a constant monitor throughout shipment and transits, furthermore fully secured vehicles and vault storage make customers feel safer during the whole transportation.

The following chart shows how the different variations are managed within the company, adopting a divisional structure per product:

Fig. no. 3.10: AF-KL Cargo sector. Organization chart: Variation & Industries.



Source: AF-KL Cargo sector

Fig. no. 3.8, makes us remember that the Variation & Industry function with its divisional approach, operates horizontally ensuring coordination, and communication through the geographical divisions.

In conclusion, with the AF-KL Cargo official charts available, our analysis leads us to affirm that the Cargo segment uses a mixed structure including both a functional and divisional approach. The first one to guarantee a clear structure, and taking advantages of the specialization processes; the second one to abate the boundaries of such a rigid structure, and to decentralize the decision making process to provide a quicker response to a changing environment.

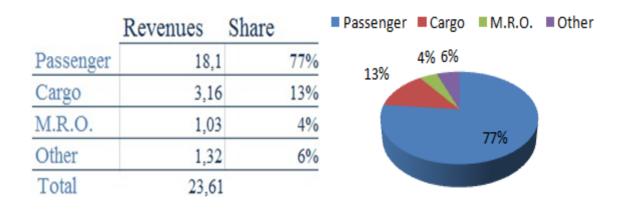
In conclusion, in the Sales & Distribution function, a matrix approach has been adopted, setting aside functions (such as the Industry & Variations one) which work horizontally, to provide a constant flow of information and communication, preventing the isolation of each geographical division from the whole organization.

### Conclusions.

The previous analysis provided the tools to compare our companies; indeed starting from their macro structures, many similarities emerge. To endow the organization with the necessary degree of specialization, order and control, both companies preferred to set a functional approach at the first level of the structure. The business segments of the two firms result to be very similar, thus comparable services are offered both by Lufthansa and Air France-KLM.

Comparing their combined revenues in the last financial year, Lufthansa, with over 30 bn (Lufthansa Annual Report 2011), results to be much larger than its competitor. Air France-KLM, in fact reached revenues for 23 bn (AF-KL Registration Document 2010-2011). The main difference, in terms of revenues, regards the profitability of the auxiliary business segments: M.R.O and Catering. According to Fig. no. 2.11, in the Air France-KLM section, we can estimate the share of each segment over the total revenue of the firm.

Fig. no. 4: AF-KL 2010-2011. Business Segment Revenues in billions.



Source: Personal elaboration

According to data provided by the Lufthansa Annual Report 2011, same elaborations can be done:

Revenues Share Passenger Logistics M.R.O. Catering 22,3 71% Passenger 13% 2,9 Logistics 9% M.R.O. 4,1 13% 71% 2,3 Catering Total 31,6

Fig. no. 4.1: Lufthansa 2010-2011. Business Segment Revenues in billions.

Source: Personal elaboration

Data are clear: the main difference in revenues is due to the importance that Lufthansa gives to the auxiliary segments. Leaving aside the core business, Lufthansa gives more or less the same importance to Logistics (Cargo), M.R.O and Catering, while Air France-KLM does not. Indeed the latter, aimed to enforce the Cargo segment, trying to increase the influence of it within the entire organization; obviously such a strategy makes Air France-KLM less competitive in M.R.O and Other (which also includes the catering service). For instance the wide gap within the M.R.O segments strongly influences the combined revenues of the firm; the Lufthansa Group earned in 2011 about three billions more than its competitors; moreover its influence within the whole company in terms of share, is the same as the Cargo segment in the Air France-KLM group.

This leads us to conclude that even though the two airlines focus the majority of their resources in their core business (passenger transportation), while Lufthansa's additional strength hides in the maintenance assistance activity, Air France-KLM gives the priority in the freight service making the Cargo a customer driven segment and thus one of the most competitive in the world.

The emphasis, that the companies put in the Cargo segment is completely different. For instance the main difference stands in the number of solutions offered by the two companies.



Fig. no. 4.1: Lufthansa Cargo destinations.

Source: Annual Report 2011

Referring to Fig. no. 2.11, and comparing the number of destination offered by the two Cargo segment, Air France-KLM offers a larger number of solutions but also a wider variety of destinations for each region:

Fig. no. 4.2: Lufthansa Cargo destinations.

	Destinations				
Regions	Lufthansa	Air France-KLM			
Nort America	21	24			
South America	13	11			
Europe	116	124			
Africa	18	. 54			
Middle East	15	34			
Asia	28	25			
Carriabbean/ Indian Ocean		16			
Total	211	254			

Source: Personal elaboration

For instance Air France-KLM offers double solution for Africa and Middle East, diversifying its offers and placing itself in the upper part of the market. Being the only one to offer direct links to many destination in Africa means tailoring solutions for customers with particular needs. Consequentially, Air France-KLM can ask for higher prices to offer customer tailored solutions.

Fig. no. 4.3: Lufthansa Cargo: Freight tonnes, Revenues, Africa/Middle East.

		Freight/mail		Net traffic revenue*		
	in	in thousand tonnes		in EUR m external revenue		
	2011	Change in %	2011	Change in %		
Africa/Middle East	144	3.1	219	6.7		

Source: Annual Report 2011

Fig. no. 4.4: Air France-KLM Cargo: Freight tonnes, Revenues, Africa/Middle East.

	No. of tor (In thousand		Cargo revenues (In € million)		
At March 31	2011	2010	2011	2010	
Africa-Middle East	289	288	600	476	

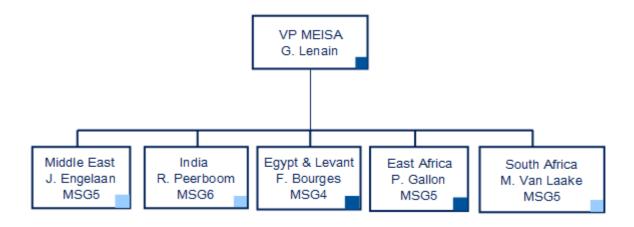
Source: AF-KL Registration Document 2010-2011

In facts, the amount of freight that Air France-KLM transports from and to the African market is double in size in comparison to the one owned by Lufthansa. The high number of destinations covered in the African markets and the solutions offered to customers make this activity very profitable for the firm, which generated revenues for 600 millions in the last financial year; Lufthansa's revenues in African markets are just one third AF-KL's one.

The macro structures of the firms result to be very similar at a first sight, what changes is the organization within the business activities. The differences in the profitability of each segment and the different resources allocation make each business structure different. Indeed the AF-KL Cargo organizational structure seems to be much more complicated than the Lufthansa one, to better satisfy the variety of customers' demand. Since the firm is known in the market as the one offering more destinations, and better covering the African markets for instance, the organization needs to be more

flexible. This is the explanations why AF-KL divides the Sales & Distribution function in geographical areas: one of the division is completely dedicated to the Middle East area and Africa, for instance.

Fig. no. 4.5: Air France-KLM Cargo: Area MEISA.



Source: AF-KL Cargo sector

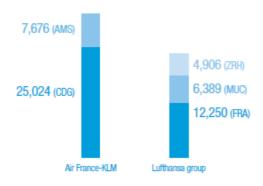
In addition, what influences the organizational structures of the two companies is the composition of the international organization. The Lufthansa Group is composed of more than 400 subsidiaries and associate companies, and the whole structure is designed so to take advantage of synergies and economies of scale. In relation to Fig no. 2.2, the Passenger Airline Group is made of six associated companies, which conserve their independence, but still need to be fully integrated within the whole Group. Thus, the first level of the structure uses a functional approach to guarantee the requested specialization (right hand side), but a at the same time a divisional approach to coordinate the associated companies in the Passenger Airline Group (left hand side).

The situation is completelly different for AF-KL, which is composed of two powerful European airlines. When Air France and KLM merged, they did not try to gain market share creating new hubs, or establishing new alliances with subsidiary companies, but they preferred to empower the already existing hubs; Paris-CDG and Amsterdam-Schipol which are now the fundamental strength and the determinant keys for the success of the company. This makes the macro structure of the company slightly different from the Lufthansa's one. When the company merged they decided to keep some activities still separated and owned by the original organization, so to strengthen both hubs rather than enforcing just one of them. For instance the passenger activity remained separated; same structure and operations characterize the two organization, but each one manages its own

passenger activity even though they are highly coordinated. This, with the initial intent to confuse the brands externally just creating a stronger imagine of the new merged company in customer's minds; but at the same time the organization keeps the management decisions separated for each company in the passenger division, so to reinforce both hubs and exploiting the experience of the two already operating firms.

This approach seemed to be successful. According to the AF-KL Registration Document, Paris-CDG and Schipol are linked with more than 11 daily flights, this hubs coordination is unique in Europe offering more than 33000 weekly connection opportunities between Europe flights in under two hours, which is 40% more than Lufthansa and its three main hubs (Frankfurt, Munich, Zurich).

Fig. no. 4.6: AF-KL and Lufthansa number of weekly offered flight connection opportunities in under two hours.



Source: AF-KL Registration Document 2010-2011

In conclusion, starting from the analysis conducted on the graphs, through the help of financial data regarding the profitably of each segment, we noticed that while the core business is the same, AF-KL makes the Cargo segment the second largest one in terms of profitability, while the Lufthansa Group earns higher profits from the maintenance activity. In response to that, the segment organization appears to be more complicated in the AF-KL Cargo, presenting first a functional (first level) and thus a geographical divisional approach in Sales & Distribution, so to position itself as the one offering more destination solutions especially in the African market.

Also the composition of the companies makes their organization different. While the Lufthansa Group operates with many associated and owned company, constantly expanding with alliances, the AF-KL Group is mainly based on the combination of two previously powerful companies. Even though the macro structure appears to be similar, Lufthansa aimed to develop an organization able to

guarantee the integration of the subsidiaries and at the same time maintain the requested flexibility. On the other side, AF-KL tried not to drastically alter the previous situation; indeed, especially in the passenger segment, it conferred individual control to the two merged companies, so to allocate same importance and resources to CDG and Schipol, keep empowering both of them at the same time rather than merging them under a single new hub.

# Chapter 3: Ramon Delima; Restructuring the Air France-

# **KLM Cargo Sector.**

The analysis of theoretical background about organizational structures, let us contextualize them in the two case study airlines companies: Lufthansa and Air France-KLM. We firstly found out how the macro structures could be apparently similar, mixing functional with divisional aspects: thus narrowing our analysis to the composition of the firms (formed by subsidiaries and associate or merged companies) and then to the business segments (especially the Cargo one), we summarized in the previous chapter how the inner structures could diverge in relation to the above influence factors. What is still missing is a closer analysis focused on a practical case, which will allow us to develop a critical thinking about how important is a clear organization structure in a firm. Thanks to a face to face interview to Ramon Delima, Vice President of Variation & Industries in the Cargo segment of Air France-KLM, in this chapter I will analyze the restructuring projects designed for the Sales & Distribution business segment, started last year.

Cargo Business

SVP S&D
M. ten Brink

Area Americas
G. Boucher

Variation & Industries
R. Delma

Key Accounts, COH
& pricing
J.P. Moreau

Speed Solutions
S. Bocquet

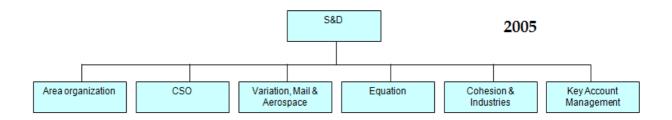
Customer Service &
Commercial Support
M. Van der Eyk

Fig. no. 5: AF-KL Cargo Business: Sales & Distribution.

Source: AF-KL Cargo sector

After the merger of Air France and KLM Royal Dutch Airlines, in 2005 a joint AF-KL Cargo was established that fitted the business perception at that time. Many things changed from 2005, thus in 2011 the old structure seemed to be not coherent anymore.

Fig. no. 5.1: AF-KL Cargo Segment; Sales & Distribution, 2005.



Source: AF-KL Cargo sector. Info Session 2011

The idea of restructuring was not coming from an internal crisis, neither from decreasing revenues in the Cargo segment; simply there was a urgent need of changing the internal way of working, clarifying the activities and the services for customers, as a response to the environmental mutation. According to the restructuring project presented in July 2011for the Info Session in New York, many things changed since 2005 within the competitive environment and inside the organization:

Fig. no. 5.2: External and Internal changes since 2005.

### External / Industry:

- key accounts continue to grow
- Shippers move towards 'global solutions'
- Postal Offices move to parcels ~express

#### Internal:

- New Commercial policy
- Simplification of the Product Portfolio
- Experience with the pros & cons of current organization

Source: AF-KL Cargo sector. Info Session 2011

Bigg organizations (key accounts) and Shippers dealing with the AF-KL Cargo were constantly growing in size and power; this required the firm to be more professional in conducting business with bigger clients. Moreover Postal Offices were moving their core business from simple letters to parcels and express solutions; this required the firm to become more challenging offering tailored services to customers' needs. In addition, after years the firm gained experience from the

pros and cons of its organization, developing new and more professional commercial policies. These are the reasons which fostered the restructuring toward a more efficient and effective S&D organization through a more logical set-up which could better fit customers' need.

The project has been divided into four main restructuring operations:

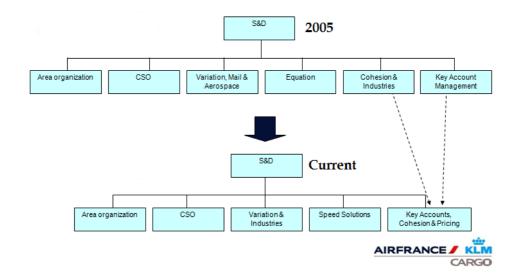
- I. Re-positioning the COH (cohesion service) within Key Accounts setting;
- II. Creation of a new Speed Solution Department;
- III. Creation of a combined Variation & Industry Department.

### I. Re-positioning COH within Key Accounts setting.

As stated in the AF-KL Cargo section of this paper, COH stands for Cohesion, which is the service offered for customers who are willing to pay more since requests a solution designed on their needs. Through this option, a dedicated team offers advices and suggestions, regarding the possible ways to customize each phase, from the contracting to the final invoicing and payment.

According to the restructuring project of July 2011, later analysis discovered a close link between the offered service (COH) and big clients agents served by the firm; indeed the top 10 key accounts represent 70% of the COH turn over. There was no coherence in keeping Cohesion and Key accounts separated in the organization; thus the following is the first technical change in the structure:

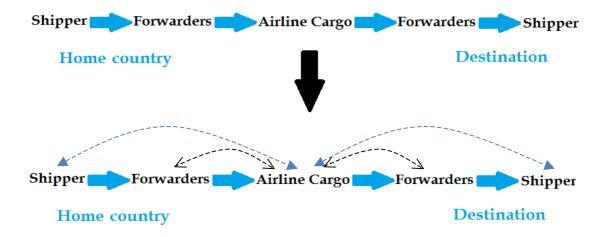
Fig. no. 5.2: AF-KL Cargo restructuring; Cohesion and Key Accounts.



Source: AF-KL Cargo sector. Info Session 2011

Furthermore the analysis lead to another result: the top 10 shippers dealing with the Cargo represent 50% of the COH turnover. The latter result, leads the firm to conclude that a direct approach also with shippers was required, since the original chain made the Airline Cargo interact only with the forwarders (agents):

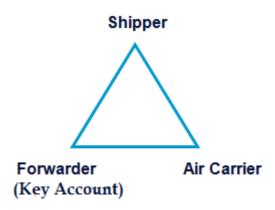
Fig. no. 5.3: AF-KL Cargo; Service chain.



Source: Personal Elaboration

The Key Accounts, COH & Pricing dedicated department, was created to keep connected the COH operations with the Key Accounts, since the latter were the ones that request this service more. Through this department the entire structure results to be more flexible and suited to offer tailored services to its main buyers; furthermore a higher proximity with Key Accounts managers makes stronger their link with the organization. Moreover through the creation of a centralized dedicated commercial team is easier to create a tri-lateral approach with forwarders (key accounts) and shippers, so to directly interact with both of them, through joint dialogues, physical meetings and tripartite agreements.

Fig. no. 5.4: AF-KL Cargo; Tri-partite approach



Source: AF-KL Cargo sector. Info Session 2011

In conclusion as we stated in the introduction, the latter restructuring, did not come from a crisis situation but simply from the necessity to modify the organization to better adapt to the growing relevance of Key Accounts and Shippers.

## II. Creation of a new Speed department.

The creation of this new speed department, gave the firm a narrowed focus on products and services which required speed during the delivery process. For instance equation, is the solution offered for urgent shipments which guarantees the product to be at its destination in the shortest time possible through an ongoing analysis of flight schedules.

In the 2005 structure, Mail was still integrated within the Variation & Aerospace department; but after few years with the spread of the e-commerce, a respectable Mail service needed to provide speed solution, also taking care of the shipping of parcels and expresses. Thus separating Mail from the Variation & Aerospace department, and clustering it with Equation so to form a joint Speed Solutions department, appeared to be the best solution:

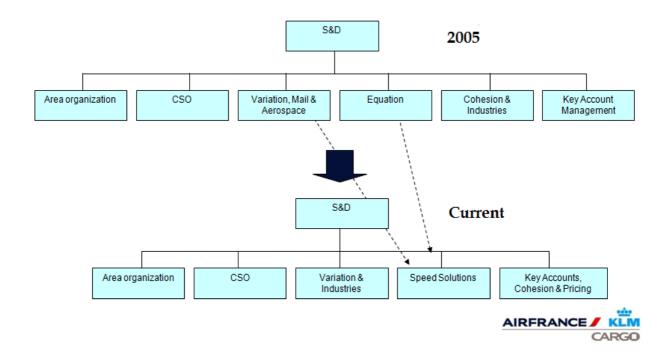


Fig. no. 5.5: AF-KL Cargo restructuring; Speed Solutions.

Source: AF-KL Cargo sector. Info Session 2011

With the advent of e-commerce, the Mail segment had a drastic decrease in its activity, while the majority of revenues were coming from parcels, express and non-letter products. Thus Postal Companies and Integrators still wanted to keep high revenues from their activity, in this case exploiting the growth of the internet purchases. Since they adapted their operations to match customer's requirements, with reliability, fast delivery, transparent and low price services, a high coordination with a freight company was needed. For instance the new Speed Solution department, including the experience of the already existing Equation service (specialized in fast delivery), was the response to the Postal and Express companies' new requirements.

According to the restructuring project of July 2011, the aims of the new department consisted in:

- Selling directly to specialized customers such as Posts, Integrators and other large players;
- Supporting and motivate the offering of Equation speed services to local or general customers;
- Leading the innovation process so to align to the ongoing growth of the e-commerce,
   and;

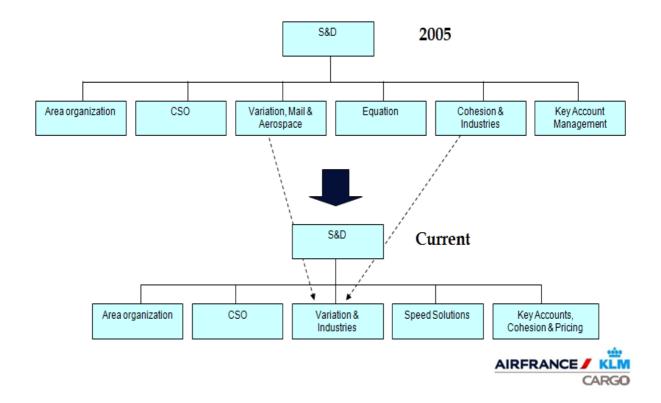
• always guaranteeing consistency between promise and delivered service to customers.

Also in this case the technical change in the structure is just a response to new expectations of a changing environment; indeed the new department with its autonomy and flexibility is now able to focus more on the requested transport requirements offering a more coordinated and professional service suited to the Postal and Express industries' new needs.

#### III. Creation of a new Variation & Industry Department.

As stated in the restructuring project 2011, the last part of the restructuring process aimed to create a new mixed department of Variation & Industry, through the pooling of Product Marketing Group (PMG) units which can now focus on specialty products (Variation products) and related Industries.

Fig. no. 5.6: AF-KL Cargo restructuring; Variation & Industries.



Source: AF-KL Cargo sector. Info Session 2011

The graph shows how, after the preceding technical movements in other departments, how Variation and Industries were moved from separated departments to a joint one.

The following table briefly shows which one were the points that the restructuring process aimed so solve or to improve:

Fig. no. 5.6: AF-KL Cargo restructuring; Variation & Industries bulletpoints.

### What needs to be improved/changed

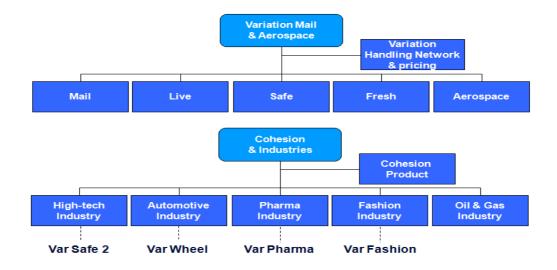
- · Complexity of the matrix organization
- · Interaction with area/market/local sales
- Acceptance of VMA, C&I in S&D
- · Clarify on ownership
- · Innovation and communication
- Clarify/simplify roles in PMG/Industries



Source: AF-KL Cargo sector. Info Session 2011

Fig. no. 5 reminds us the complexity of a matrix structure, which works both horizontally and vertically, mixing both disadvantages and advantages of a functional and a divisional approach. To better understand how the restructuring managed to reduce the complexity of the organization, we first analyze the original departments with their divisions:

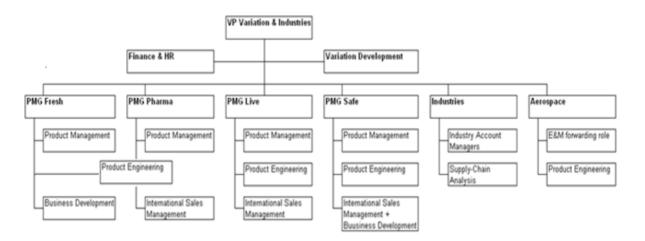
Fig. no. 5.7: AF-KL Cargo restructuring; C&I and VMA.



Source: AF-KL Cargo sector. Info Session 2011

According to the current Vice President of the V&I Ramon Delima, the previous structure generated confusion within the organization, and in customers' minds; indeed it was confusing why some of the variation products (Safe2, Wheel, Pharma and Fashion) were managed by the industries, while the remaining products were not. In addition there was an overlapping of responsibilities in the pharma sector because just pharma 2, with its precise temperature range, was controlled by the industry, while for the other pharmaceutical products there were not specific variation divisions. Furthermore keeping industries and variations isolated, prevented the firm from exploiting economies of scales due to similar treatments in the operations of some products: for instance when the new structure gathered together Pharma and Fresh, the product engineering function became common, since the treatments and the temperature ranges used for Pharma and Fresh 1,2 and 3 were similar.

Fig. no. 5.8: AF-KL Cargo; joint V&I.



Source: AF-KL Cargo sector

With the above current structure the re-clustering succeeded in:

- Reducing the complexity of the organigram; through a simplification of the previous structure, gathering together similar activities;
- reating PMG units; which now include both the product itself and the related industry;
- Exploiting economies of scales; making certain operations common to similar products (Fresh and Pharma);
- > Simplifying services and products offered to customers;
- ➤ Keeping the product expertise in each function as the added values of the entire Company;

- Reducing the number of product labels, placing them into one of the PMG units, and in;
- ➤ Clarifying the roles in the PMG units, rewriting the roles position and reducing them to three.

But what Ramon Delima stresses during the interview, is that the above technical changes made in his department are just the starting point toward a real restructuring. Indeed he emphasizes that, only by changing labels and moving pillars within an organigram cannot make things different; what is really important is training the managers, monitoring them, delegating them powers and making them constantly communicate. A matrix structure could result very complicated, especially in the ownership decisions, since an actor could be controlled by two different managers. Ramon Delima decided not to make a big deal out of it; in practical facts, even though the organigram does not show it, his structure results to be less hierarchical than it seems, being based on a high delegation of powers toward lower levels. He strongly believes in the power of communication and in the flow of information through each level of the organization, creating a pleasant environment where the hierarchical power differences are not percept by the group. For instance, in addition to the technical changes, he also promoted the establishment of transversal teams. Recently he created a project team chaired by the responsible of the PMG Safe, which included the product managers of all the PMG units. Instead of seeing it as a way of making the structure even more complicated, Ramon Delima is fully confident with the results that such a project will bring; he stated that the flow of communication in the latter case, will make the product managers relate themselves with others, learning from other's mistakes and taking advantages of the group work.

To summarize both technical and non-technical solutions were used to restructure the Sales & Distribution department of the Cargo Sector. Technically the organization re-clustered certain activities such as: Cohesion and Key Accounts, Mail and Equation services into Speed Solutions, and Variation & Industries, so to provide a more proactive response to the changed market environment since 2005. In addition to resolve some of the matrix structure issues, high delegation of power is delivered to lower levels to ease the organization. Furthermore to create a pleasant environment and to reduce the differences between levels, project teams are often created to foster communication and to guarantee managers overall improvements.

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