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THE EUROPEAN AIRLINES TRANSFORMATION: HYPERCOMPETITIVE AND LONG TAIL EFFECTS

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Abstract

This paper focuses on technological and organizational levers as strategic determinants of innovation and transformation of airlines, considering the high rate of technological and organizational change (Barrett S., 2000) occurred in airlines market since 2004. The European airlines evolution will be especially examined on the basis of the hyper-competition phenomenon.

European airlines industry appears as a paradox both from an organizational and a technological point of view. By an organizational perspective, classical competition theory (Porter 1979, 1980, 1985) opposes low cost and differentiation as two mutually exclusive “generic strategies”. Not choosing between these strategies dooms firms to “stuck in the middle”. However, this static model does not seem to explain the behaviour of firms in hyper-competitive (Volberda, 1999) and turbulence environments characterized by high and frequent changes. In airlines industry the coexistence of “low-cost” and “networks” airlines seems to be an illustration of Porter’s dualist model. If low cost and differentiation can coexist, does it mean that Porter’s duality is still valid in hyper-competition? We argue here that a close analysis shows that both types of companies practice cost reduction and differentiation. Moreover, there are some “hybrid airlines”, like Meridiana, that operate in the same time as low cost and network airlines. On technological standpoint, the main effect of the Internet channel is supposed to deliver more consumer surplus than cost reduction, according to the Long tail theory. An inclusive analysis of Internet performance into European airlines is usually perceived to be cost reduction and differentiation. Therefore, this paper suggests moving beyond the “airline paradox” in Europe.

Keywords: European airlines, hyper-competition, Long tail, Internet channel, Organizational innovation.

1. INTRODUCTION

“Porter’s theory of competitive advantage is not relevant in hypercompetitive environments” (Volberda, 1999). This statement has been so far demonstrated for the American manufacturing industry and the Internet industry (Rindova and Kotha, 2001). Because they are an “information intensive” industry airlines enjoyed a great attention from IS researchers. However, a very first research question would be if this industry entered hyper-competition and when? In order to respond to this question, we will here only focus on the European airlines industry.

On the organizational standpoint, in European airlines, a clear distinction has been established between “network carriers” and “low-cost companies”. As we suspect European airlines to be in a hyper-competitive state, this distinction appears as a paradox because it suggests that the two Porter’s generic strategies do apply in hyper-competition in Europe. This paper investigates if the distinction between “low-cost” and “network airlines” is indeed as sharp as it seems, or if both types of airlines keep on trying to reduce cost and develop differentiation.

On the technological standpoint, the main effect of the Internet channel is supposed to deliver more consumer surplus than cost reduction, according to Long tail theory (Brynjolfsson, Hu and Smith, 2003, 2007). However, the effect of Internet on airlines is usually perceived to be cost reduction, therefore allowing new entrants like the “low cost carriers” mentioned before (Smith et al 2001). This is the second objective of this paper: describe the role of the Internet channel in airlines, in order to establish if they are used for cost reduction only or also for customer benefits.

The first part of this paper is devoted to the theoretical frameworks that are used in this paper. Indeed, between hyper-competition and the technological leverage represented here by the Long tail, the necessary intermediary level too often forgotten in economics-oriented paper is the “black box” of the organization, and more specifically organizational innovation. The second part will apply these frameworks to the description of the European airline industry in general, and to Meridiana company in particular.

In order to understand the effect of Internet technologies, we will first describe the theory of hyper-competition that describes a growing numbers of nowadays environments. Then, the consequence on organizational innovation will be described. Finally, the long tail theory will be presented in a third section.

The evolution of European airlines will be presented in a first section in order to establish if and when this industry became hypercompetitive. Then, the organizational side of the “airline paradox” will be discussed both at the level of the European airlines industry in general and of a single company level: Meridiana. In a third section, the technological side of this paradox will be described

2. BACKGROUND

2.1. Hyper-competition

For two decades, competitive environment analysis has been dominated by Michael Porter’s (1979, 1980, 1985) “market forces” model and “generic strategies” model. These models appeared to be no more relevant in hyper-competition (Aveni, 1994). Indeed, according to Volberda (1999) in markets characterised by globalization, rapid technological change, shortening of products life cycles and aggressiveness of the competitors, the hyper-competition forces move more quickly, altering the relationship with the different competitors and their positioning within the market. Hyper-competition is characterized by short periods of competitive advantage, interrupted by frequent destructions which alter the basic rules underlying competition and it arises when the

environment changes so rapidly that *“the system has not recovered from one change before a new change enters the system, is a new reality and we need new ways of dealing with this reality”* (Johannessen et al., 1999, p. 187). Therefore, a company cannot compete on cost or on differentiation only (Rindova and Kotha, 2001). We suggest calling the combination of these two “generic strategies” hybrid hyper-competition.

The consequence is that, in hyper-competitive environments, innovation is vital for competitive advantage (Johannessen et al., 1999), therefore companies have to rely increasingly on knowledge (Sveiby, 1997). A better use of existing knowledge and a more careful assimilation and organization of new knowledge becomes the “business imperative” (Thurow, 1996).

In order to survive the enterprises operating in hyper-competitive environments must develop a superior adaptive ability which would allow them to respond rapidly and efficiently to sudden and unexpected changes coming from external environment. In such contexts, change becomes a factor of “creative destruction” and innovation a “big disturbance” because it “disrupts the existing system and enforces a distinct process of adaptation”(Schumpeter, 1949). Thus, organizations must innovate continuously, rather than maintain a static balance.

More precisely, Rindhova and Kotha (2001) suggest the following set of criteria for evaluating whether an industry is in hyper-competition or not:

- Shifting Markets and Competitive Positions (frequency of market change)
- Reduction of Entry Barriers (shifting bases of competitive advantage)
- Scale Economies versus Innovation
- Frequency of Process Change
- New Products Rate
- Productivity versus Flexibility
- Sustainable versus Transient Competitive Advantage
- Learning Curve versus Transient Knowledge
- Competitive migration
- Continuous morphing.

As we can see, most of these criteria refer to the environment. However, through the idea of “continuous morphing”, the authors suggest a link with the structure of the organization that must be centred on innovation.

2.2. Organizational Innovation

Organizational structure has been for decades considered as a trade-off between centralization and decentralization. However, the point is that none of these options may solve the problem of instability because they are still based on plans, procedures and rules. Since the 70’s crisis, none of the organizational structure, from functional to divisional and to matrix, seems to deliver the mandatory flexibility needed in hypercompetitive environment. This flexibility may only be achieved through a management system that should be no more mechanistic, i.e. based on plans, procedures and rules, but organic, i.e. based on unscheduled meetings. Such organic management system is the fundamental principle of the organizational innovation (Mintzberg, 1979).

According to Daft (2007), many environmental forces, linked to a globalized economy which concerns every business, push towards substantial organizational changes. However, *“the risk for many organizations is culture becomes rigid, as if it were sunken in cement”* (p. 44). In hyper-competition, organizations must become “learning” and seek for adaptive solution to environmental changes whereas they promote network communication and collaboration in such a way that everyone is involved within problems identification and solution, allowing to the organization to experiment, improve and constantly expand its own abilities (Hannah et. al, 2009). Learning organizations, characterized by open information, a lower hierarchy level, an adaptive culture and the creation of innovative knowledge, constitute a suitable reply to hyper-competitive contexts in which change, rather than stability, is the dominant rule (Daft, 2007).

According to Aveni (1994), in order to effectively survive and operate in a hyper-competitive environment, organizations, must be permeated by their own vision “similar to the way institutions are infused with value” that would represent the aim or the mission of organizations which it transcends the material purposes and justifies all efforts (Jonassen 1999).

Therefore, in hyper-competition, rather than choosing between cost reduction and differentiation with rigid organization like functional, divisional or matrix, companies tend to focus on innovation, flexibility, knowledge and vision... and therefore combining dynamically cost reduction and differentiation rather separating them.

As we announced, the second aspect of the “airline paradox” is that the main effect of the Internet on airlines industries is supposed to be cost reduction, therefore allowing new entrants like “low cost carriers” (Smith et al 2001). This effect of Internet is challenged by the Long tail theory.

2.3. The Long Tail Theory

Long Tail theory describes how a mass market evolves towards a manifold of niche markets (Anderson, 2004). This theory relates especially Internet to economic models. It especially helps understanding the evolution of digital entertainment market (books and video rental). Graphically represented, the long tail on the abscissas axis allows a the richness of space, offer, choice and distribution of most products sold in the Internet, especially through the help of the social web, which is the result of sharing and co-producing of contents and resources. Anderson argued that products that are in low demand or have low sales volume can collectively make up a market share that rivals or exceeds the relatively few current bestsellers and blockbusters, if the store or distribution channel is large enough. In the case of Amazon.com, sales come from obscure books that are not available in brick-and-mortar stores (figure 1).



Figure 1: The “Long Tail” (Andersen, 2004 Brynjolfsson, Hu and Smith, 2003)

In this graph, Amazon's book sales or Netflix's movie rentals would be represented along the vertical axis, while the book or movie ranks are along the horizontal axis. The total volume of low popularity items exceeds the volume of high popularity items. By greatly lowering search costs, information technology in general and Internet markets in particular could substantially increase the collective share of hard-to-find products, thereby creating a longer tail in the distribution of sales.

Previously, Brynjolfsson, Hu and Smith (2003) presented a framework and empirical estimates that quantify the economic impact of increased product variety made available through electronic markets. While efficiency gains from increased competition significantly enhance consumer surplus, for instance by leading to lower average selling prices, increased product variety made available through electronic markets can be a significantly larger source of consumer surplus gains. This point demonstrated for books may also apply in other SKU-intensive consumer goods such as music, movies, consumer electronics, and computer software and hardware. (Brynjolfsson, Hu and Smith, 2003).

Demand-side factors contribute to the Internet's "Long Tail" phenomenon. Through a reduction in search costs, the Internet channel exhibits a significantly less concentrated sales distribution, when compared with traditional channels. The difference in the sales distribution is highly significant, even after controlling for consumer differences. Furthermore, the effect is particularly strong for individuals with more prior experience using the Internet channel. Internet purchases made by consumers with prior Internet experience are more skewed toward obscure products, compared with consumers who have no such experience. Opposite outcome is observed when comparing purchases by the same consumers through the catalogue channel (Brynjolfsson, Hu and Simester, 2007).

Dozens of markets of all types are in the early stages of a revolution as the Internet and related technologies vastly expand the variety of products that can be produced, promoted and purchased. Through "Long Tail" phenomenon, customers derive value from an important characteristic of Internet markets: the ability of online merchants to help consumers locate, evaluate and purchase a far wider range of products than they can typically buy via the traditional brick-and-mortar channels.

Long Tail can be analyzed from both the supply side and the demand side and identifies several key drivers. On the supply side, e-tailers' expanded, centralized warehousing allows for more offerings, thus making it possible for them to cater to more varied tastes. On the demand side, tools such as search engines, recommender software and sampling tools are allowing customers to find products outside of their geographic area. Second order amplified effects of Long Tail, may include the growth of markets serving smaller niches (Brynjolfsson, et al, 2006).

Therefore, the characteristic of the Long tail internet phenomenon are:

- 1- Product variety
- 2- Consumer surplus
- 3- Niche markets
- 4- Searching tools
- 5- On-line recommendation
- 6- Experienced on-line users

In this first part, we established that:

- in hyper-competition, Porter's dual model is irrelevant
- in this environment, organizations compete through innovation
- IT is an important leverage of adaptation to customer's needs, especially through Internet "Long tail" phenomenon.

In the second part, because they seem to represent an exception in the organization in hyper-competition, exception that we suggest to call "European airlines paradox", we suggest to study with the framework presented above the air travel industry in Europe. However, the Meridiana company seems to be an exception to that paradox.

3. HYPER-COMPETITION IN EUROPEAN AIRLINES

Four different phases may be identified in air transport market in Europe, each one being related to the occurred changes into economic and legal framework and to the increase of complexities in the competitiveness environment. The evolution of European Airlines can be summarized in one table (Figure 2).

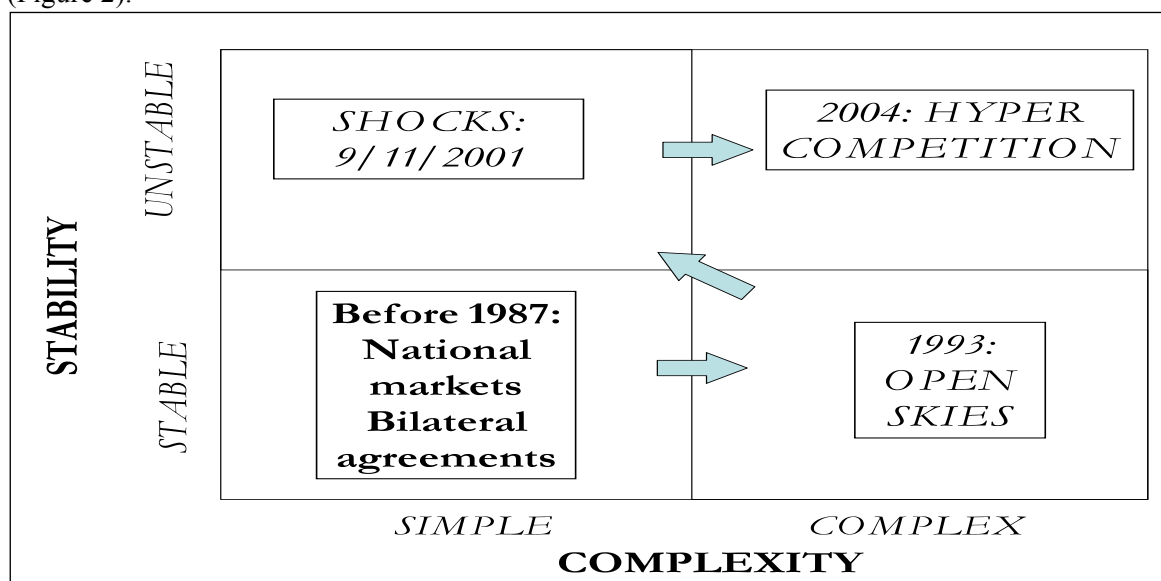


Figure 2 – Evolution of the European Airlines industry

The first phase of the European air transport market, which lasted up until 1987, was characterized by the existence of an oligopolistic regime having a nation-based dominance of monopolies regulated through bilateral agreements. In 1987, the European Council of Ministries (Decision 87/602/EEC), defined the first set of laws regarding air transport liberalization which, following the deregulation process already started in the US during the '70s, abolished, in accordance with specific agreements, the existing restrictions for the control of the respective national markets in terms of air routes and rates. This first regulation on the repartition of passenger capacity between air carriers in the scheduled air services among Member States and to the access of air carriers to intra-European Union routes, established the foundations for the definition of an international agreement for air space deregulation (open-skies).

A second deregulation phase reached in 1993 with the end of national restrictions and the application of the freedom of establishment (set out in Article 49 of the Treaty of Rome) to air transport sector. Thus, the 1st January 1993 – with the entry into force of the Regulation n. 2408/92 - the European Commission transferred those principles of free market to air-transport sector (second phase). This "open skies" regulation reduced the existing restrictions, defined the procedure for the access of new airline companies into the intra-Community air routes and introduced more liberalized air rates. Via this open skies regulation, any airline could freely operate from any EU Country due to full traffic rights. These preliminary regulations had a strong impact on the European airline market: since that moment on and for long time, “the market has changed enormously due to different forces, often not predicted, which have pushed towards an always increasing competitiveness” (CE, DG TREN, 2005).

However, in 2001, the terrorist attack of September 11th caused a significant shock-crisis in global economy (third phase). Such event produced an immediate impact on the whole airline transport market with serious implications for the world economy and a long period of instability and recession. A relevant crisis involved the airlines sector, with a strong reduction in the number of passengers on a global scale and a worldwide decrease of routes and flight transfers. From then and for several years, most of the United States carriers – like American, Delta, United, US Airways, Northwest and Continental – suffered important losses of liquidity. Only a specific law on bankruptcy, launched by the US government, allowed the survival of many airlines. Such protectionist law, however, caused further losses to carriers which continued to operate despite the

strong reduction of world flights. The decrease in demand caused an overcapacity in a moment of tickets costs reduction and fuel costs increase. Many airline companies, less competitive and financially limited, failed.

In 2004, the establishment of the SES - the Single European Sky - and the adoption of a set of new regulations concerning competition – which included the Framework Regulation (EC Regulation no. 549/2004) and three technical regulations (EC Regulations no. 550, 551, 552/2004) brought a rapid increase of competition with important repercussions on the world market (fourth phase).

According to the Commission, such set of regulations allowed “to reduce the excessive fragmentation of the European airspace and the high transaction costs for users” (CE, DG TREN, 2005) through reduction of delays, greater capacity in terms of air traffic management (ATM) and harmonization of technologies used in the management of traffic all over Europe with a positive impact in term of global air transport growth, supply of air navigation services, inter-operability of air traffic management, as well as on security, environment and technology management. (Della Corte, 2009).

Starting from 2004, a number of unexpected and unplanned factors induced a significant increase of competition and generated a sudden increase of organizational and technological changing rate in airlines market.

The deregulation of the European Union airspace has generated significant changes into the airlines industrial structure stimulating the process of globalization, the development of new low-cost companies and the use of innovative technologies to manage the commercial activities. Airports privatization has followed this new market organization with a consequent global change of their governance policies. Therefore, the emergence of hyper-competition seems obvious in airline industry from 2004. The next section is devoted to the description of organizational side of the airline paradox.

4. THE ORGANIZATIONAL SIDE OF THE PARADOX

The organizational side of the “airline paradox” in Europe is in a nutshell is the following: While European airline industry evolved towards hyper-competition, their organization seems to be split between two distinct structures referring to classical competitive analysis. This section will discuss this organizational paradox first at the European industry level and then at the level of one single corporation: Meridiana.

1.1. Industry level

Since airline industry entered in hyper-competition, the organization of corporations seems to be a paradox. Indeed, the expansion of secondary airports in geographical areas not operated by the main European airlines – stimulated by European funds (CSF 2000-2006 ERDF) –, and the policies oriented to increase airlines competition, have encouraged the growth of low-cost carriers. Since that moment, a new organizational order has characterized the market:

- On the one hand, the main airline companies, the so-called “network carriers”, focusing on the supply of integrated services have defined new alliances and cooperation agreements to control the market.
- On the other, low-cost carriers, operating point-to-point and based on costs reduction and by low-fare have developed new routes and effective strategies to implement their business.

In a competitive environment, the coexistence of these diverse business-models is essential, sharing Spinetta’s assumption that “*the two models are complementary and the air transport sector needs both*” (Spinetta, 2004, p. 4).

But the point is that European airlines seem to reproduce Porter's (1979, 1980, 1985) duality. Do we have in hyper-competition the reproduction of a dualist model with cost reduction on the one hand and differentiation on the other? As we will see thereafter, this situation is not as clear as it appears.

1.1.1. Low-cost airlines also represent differentiation

Indeed, low-cost airlines embody one of the most significant consequences of European airlines deregulation. These carriers - often evolution of charter carriers - have introduced a range of innovations within airlines market that have completely changed it (Pels, 2009).

Low-cost carriers have contributed to expand and stimulate competition, through the development of much more attractive and flexible competitive strategies and greater adaptive capacities compared to network airlines. Another key-element of this strategy is the application of the point-to-point system, characterized by the connections between two airports without any network-coordinated flight plan with other airlines. Although it is not plausible to identify a single strategy for low-cost carriers, in the same time, it is possible to define some common elements in their business models based on the extensive use of outsourcing to reduce fixed costs, the application of low-fares, the use of a homogeneous fleet, the provision "no frills" services and the existence of a single flight class (Della Corte, 2009; Pels, 2008; Doganis 2006). These integrated innovative strategies allow the cost rationalization and the increasing of efficiency and management flexibility. However, cost is not the only feature of "low-cost companies". Indeed, these companies focus on new routes which are not served by the main airline companies. They are also using secondary airports (Pels, 2008). Therefore, there is clearly an element of differentiation in the "low-cost" model without "sticking in the middle" as Porter (1980) would predict. "Low-cost companies" are in the same time reducing cost and promoting differentiation with their new routes not used by Network companies.

1.1.2. Network carriers also reduce cost

According to Pels, network companies have the risk that low-cost companies could enter in competition on the business segment of the short-haul flights (actually, just like EasyJet already does) as well on the long-haul routes (Meridiana) through the use of density economies (Pels, 2009).

However, while Ryanair has centred its strategy on the use of secondary airports and no-frills services, EasyJet and Meridiana operate on primary airports, sometimes into the business segment, with a direct competition with the main air carriers (Spinetta, 2004).

On the other hand, the so-called "flag carriers", today defined "Network carriers" too, operate due to hub and spoke networks, which allows a diffuseness of connections and the coordination with other companies to guarantee transfers to final destinations. Hub and spoke networks are characterized by a geographical concentration around the hub, aim to transfer towards secondary airports in reasonably short times (Pels, 2008). Furthermore, they use customer care systems and loyalty schemes with their main clients and innovative technological platforms to commercialize advanced products and services of Customer Relationship Management.

Therefore, network carriers have a business model characterized by several number of daily connections towards a wide number of destinations, a wide portfolio of international and inter-continental destinations and, as far as short-medium-haul and long-haul routes are concerned, a diversification of seats and related rates and qualified customers services sub-divided by targets (Pels, 2008; Della Corte, 2009). Networks carriers are also characterised by the mergers and acquisitions phenomenon, aim to expand its own scale economies that is to overcome

organizational, management and financial inefficiencies. Within this framework, the merger between AirFrance and KLM is a significant best practice, considering that such agreement has stimulated the processes of technological and organizational change of both companies and has accelerated the consolidation processes in the sector. For the two companies, the integration strategy has induced important changes in terms of hub and spoke strategy, the definition of new routes and the development of a code sharing strategy aimed at guaranteeing total integration of customers and routes.

The point is that Network carriers also try to reduce cost, especially through rationalization of operations, penetration within new markets and development of own hubs (Spinetta, 2004). According to Pels (2009), through the hub and spoke networks, airlines may freely define the optimal network and, in many cases, define their own hub and spoke network in order to exploit density economies; in this way the cost per seat/passenger decreases, on the increasing of the number of seats or passengers.

Therefore, in this part, we argued that “low-cost airlines” represented also differentiation and that “Network carriers” were also reducing cost. Moreover, both models are not based on a competitive positioning, but on active innovation where Internet has an important role, especially through the Internet.

Finally, we suggest describing one case of “hybrid” competitive positioning between low-cost and network carrier that seem to use the Long tail effect: Meridiana Company.

1.2. Company level: the Meridiana case

Meridiana is a fully private capital airlines born in 1963 with the name of Alisarda on the initiative of Prince Aga Khan, with the first purpose to favour the development of the tourist activity in North-Eastern Sardinia, until then served only via sea lines. In 1991, in the light of the new company reality, which sees the company engaged in an European market, the corporate name has changed to Meridiana S.p.A. Meridiana today is a structured company which pursues a number of initiatives in the tourism industry, and the main business remains air transport. Meridiana is the parent company and it operates in an integrated way for the production of air transport products and services and maintenance, airport management, tour operating, and sales of food and wine products. Its current reality is the result of a long evolution, based on over 40 years of activity, which has implied a strong capacity of adaptation to market changes and overcoming several difficulties.

Meridiana can be characterized by being a “hybrid” organization combining cost and differentiation, as an innovative organization and, through its usage of the Internet, as a “niche player”

1.1.3.A “hybrid” organization

The analysis of Meridiana organization suggest a hybrid configuration of its portfolio characterized by a full attention to the market opportunities and to the cost reducing with an horizontal differentiation of routes and targets related to the several geographic areas, in a split configuration identifiable as ‘one strategy for each market’.

The company conducts a portfolio strategy for two distinct markets:

- In front of low –cost competitors, the strategy will focus on cost reduction – i.e. point-to-point system, exemplification of the tariffs system, advanced booking, contained industrial costs, but not equalling other low-cost carriers _ and on ancillary revenues both cross-sell (Travel insurances; Car Rental; Dynamic Packaging; etc) and up-sell (service cards; Pre assigned seats ; bag on hold; airport services i.e Fast track, vip lounges, etc) ;

- In front of network carriers the focus becomes the development of **complementary** services such as fast track, VIP room, diversity of departures time (such as the route Verona-Rome where the main competitor is Alitalia) and commercial agreements with other network carriers.

The important point is that this cost versus differentiation choice also depends on geography:

- For domestic routes, Meridiana focuses on cost
- For long-distance routes, Meridiana focuses on product differentiation.

Let us describe the cost reduction aspects and the differentiation aspects.

1.1.3.1. Cost reduction aspects

Domestic routes, the competitors are usually “low cost carriers”. This operations are characterized by a substantial no frills strategy to maintain low-cost and to be competitive with the different carriers. The point is that Meridiana do not exactly follow “low cost carriers” business model because there are complementary but light services on flight with the possibility to integrate the portfolio services related to the target ,to the routes competitors and to the paid fare.

Differentiation aspects

There are three five of differentiations aspects: long distance routes, agreements with network airlines, acquisitions, leisure market and ethnic routes.

1. For long distance routes, the main competitors are network carriers, thus the strategy will be defined related to the specific competitors. The differentiation of class and of the related on flight services (economics and business) remains the business model dominant. The plan for the development of international routes designed on an annual basis according to market trends, partnership with networks airlines and the Meridiana own targets.
2. There are more and more agreements with network agreements (such as KLM, Iberia, Air Moldova, WindJet, BluPanorama, British Airways). These agreements allowed entering international markets, otherwise unreachable.
3. The acquisition of Eurofly has increased the number of destinations towards leisure routes in the Mediterranean, Northern Africa, Indian Ocean and United States (New York).
4. A historical leisure orientation still exists for the international routes too (such as Maldives or Mauritius). For this specific segment the company has developed a set of touristic and accommodation services (such as hotel, car and private vehicle bus reservation, events reservation) provided through a new spin-off of the group: Wokita.
5. Meridiana developed also recently “ethnic routes” related to the Italian immigrations. These routes implied a significant increasing of Mediterranean Area connections for North Africa and Balkan countries with a differentiation of the related services (such as a largest exemption).

Differentiation appears obvious through diversification when we consider the main processes of Meridiana’s value chain (figure 3)

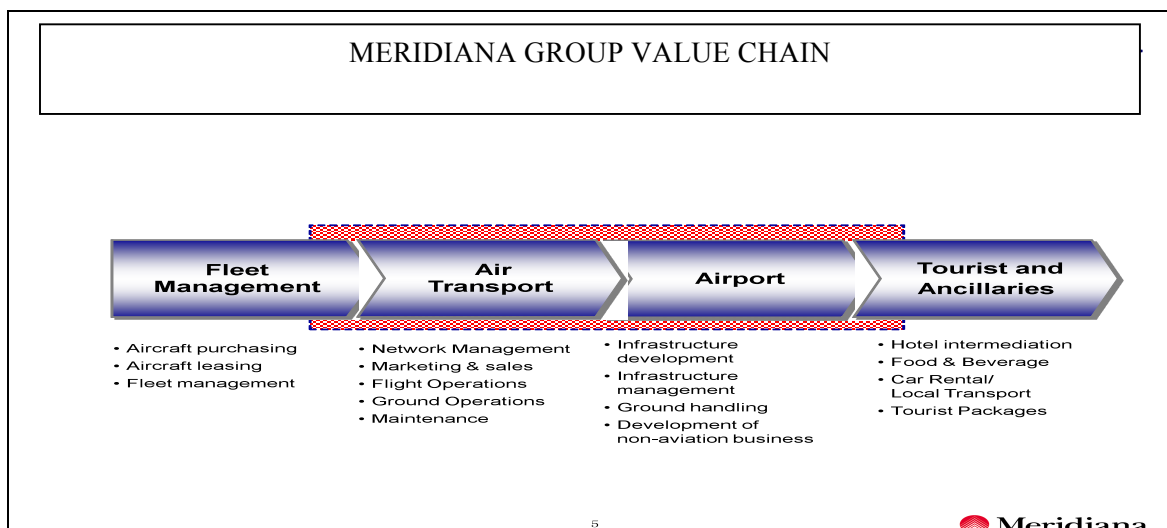


Figure 3: Meridiana value chain

In this value chain, it appears that “tourist and ancillaries” seem to be of utmost importance. This is an exception in airlines, that usually focus on the two firsts processes (fleet management and air transport). Therefore, airport management is an exception in Europe. The practice of combining airport management and airlines management is rather a USA practice than a European practice.

1.1.4.A “niche player”

Meridiana’s business model can be considered as an evolution of the low-cost transport, with specific characteristics on the European market, being characterized by

- quality of service,
- connections with some of the main airports,
- diversification of service classes on international flights,
- network operations with Eurofly on international routes,
- no low-fare tickets, rather the use of promotional tariffs,
- Selection of international tourist routes related to the leisure-luxury segment and national routes related to the business segment (i.e. ~~Rome-Milan~~ and Rome-Verona).

This “hybrid” model may be understood in the perspective that Meridiana appears as a “niche player”. Indeed, in 2003, the new slogan of the company “low cost and high quality” appears to be in sharp contradiction with Porter’s dualism. In 2004, Meridiana consolidates its own role as a domestic carrier, also directed toward the business segment, through the establishment of the Milan (Linate) - Rome route and increases in a significant way its own traffic which tops over 4 million transported passengers. Simultaneously, it develops the direct-selling channel, through its own web site and direct agencies which, in 2005, reaches 40% of the turnover.

In the same year, it acquires 15% of the Florence’s airport company and purchased the majority stake of Eurofly airline. In financial year 2006, Meridiana closes with a historical record of passengers, transporting 4, 6 million people and recording an increase of approximately 15% with comparison to 2005. During the year 2007, Meridiana pursues a through strategy to develop the international network, starting some connections from Verona and Florence towards Eastern Europe and signing a code-sharing agreement with the share-partner Eurofly towards Ibiza, Tenerife, Mykonos and Crete and subsequently towards New York.

Meridiana is now an integrated group of several companies, each one with a specific focus within air-transport and tourism sectors. The following chart evidences the current group structure in which we can observe the configuration characterised by a excellent integration within the

business value chain through diverse spin-off companies located in strategic business area - as Alisarda, Wokita, Eurofly, Cortesa - and the govern of two important Italian airports as Olbia (Sardinia) and Florence airport.

In the next future the start up of a new spin-off company for the management of the maintenance named “Meridiana Maintenance” close this strategy of integration.

This “niche player” approach is represented by the structure of the Meridiana group (figure 4).

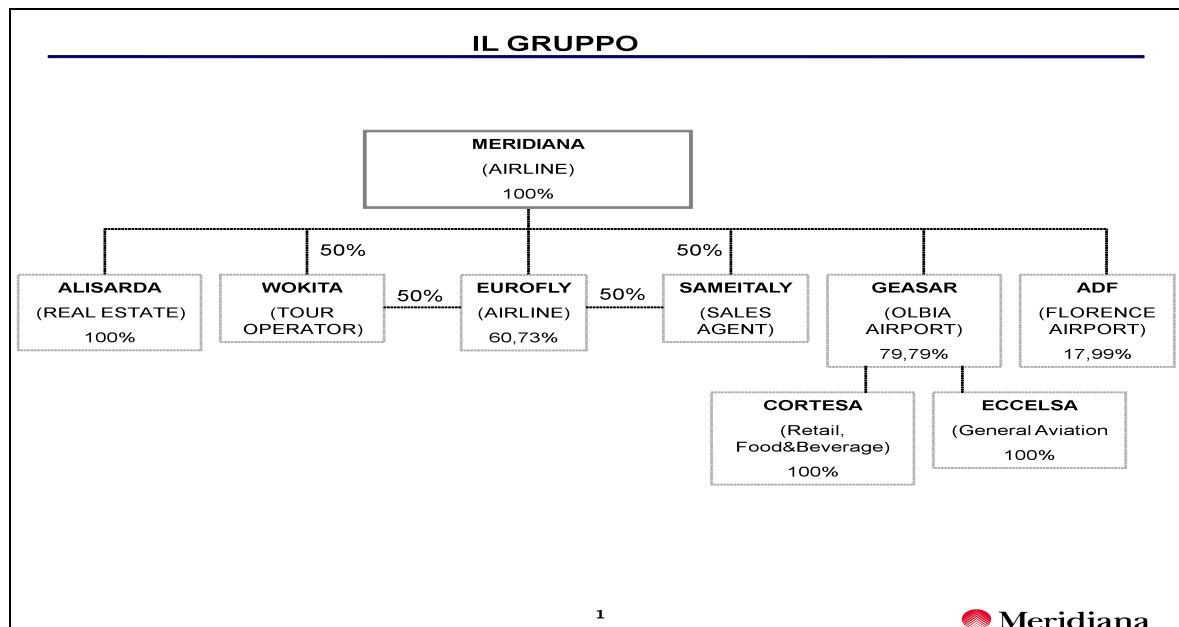


Figure 4: Meridiana Group

One of Meridiana’s strong points lies in the ability to respond in a dynamic way to the market’s changes, adapting in a proactive way to new dynamics and sometimes anticipating certain trends. The definition of one’s own market niche, which goes beyond the easier commercial choices, the supply chain integration with the ad-hoc creation of designated businesses (the management of the airports of Florence and Olbia; Wokita for the commercialization of tourist products, Kara Sardinia for the sale of food and wine products from the Sardinian tradition licensed to operate inside the airports managed by Meridiana) the development of an own network through partnership agreements with important companies, all this makes Meridiana a unique case in Europe

On the technological side, Meridiana’s web site (www.meridiana.it) became the first air transport site in Italy with a total of more than 1.700.000 ~~1.215.000~~ of individual visitors (data source: Nielsen Net Rating) generating a share of over 55% of the overall turnover, associated with the portal for the B2B and the Call Centre. Also, in 2006, Meridiana starts its own on-line tour operator named “Wokita.com”. The creation of “Wokita” web tour operator has allowed the access into new markets and business areas. Wokita operates exclusively through the Internet on the leisure segment, through its own multilingual web site, structured for the e-commerce and the utilization of innovative technologies for research, the creation of tourist package holidays, and the use of innovative technologies. Therefore, if Internet was used in a cost reduction perspective, it was also in the case of Wokita a clear diversification towards additional services not only focusing on low cost, therefore in a perspective of differentiation.

The importance of the Internet Channel in Meridiana’s marketing and sales can be described from its organizational charts. Let us start with the general chart (figure 5):

Figure 5 – Organization structure

However, this “matrix” chart does not describe all the reality. Indeed, today, the focus of the organization is on the marketing and sales and on the information system management. The CEO preside each strategic area with particular attention to the distribution strategies. The point is that the “DIT” (IT direction) does not include the Internet Channel. Indeed, let us focus on marketing and sales (figure 6):

5. THE TECHNOLOGICAL SIDE OF THE PARADOX

On the technological standpoint, the main effect of the Internet channel is supposed to deliver more consumer surplus than cost reduction, according to Long tail theory. However, the effect of Internet on airlines is usually perceived to be cost reduction, therefore allowing new entrants like the “low cost carriers” mentioned before. Indeed, according to Smith and al. (2001) “*Electronic ticketing facilitated the growth of Internet travel sales by eliminating the need for paper tickets, reducing the lead time and cost associated with online purchases (p. 41)... For example, America West reports average per-ticket distribution costs of \$23 for traditional channels versus \$6 for direct Internet sales*” (p. 44)

Against this idea, we will first analyze the cost structure of “low-cost airlines” and then discuss about the differentiation allowed by the Internet in this industry

Cost advantage of “low-cost airlines”

The model elaborated by Doganis (2006) and re-proposed by Pels (2008) suggests an evaluation cost advantages for low-cost companies (table 1).

<i>Costs Savings</i>	<i>Advantages of Low Cost</i>	<i>Costs Index</i>
<i>Higher seating density</i>	-16	84
<i>Higher aircrafts utilization</i>	-2	82
<i>Lower flights and cabin crew salaries</i>	-3	79
<i>Use of secondary airports</i>	-4	75
Outsourcing maintenance/single aircraft type	-2	73
Minimal station cost and outsourced handling	-7	66
No free in-flight catering, fewer passenger services	-5	61
No agents' commissions	-8	55
Reduced sales/reservation costs	-3	52
Smaller administration costs	-3	49

Table 1– Cost advantage of low-cost airline companies (Source: Doganis, 2006).

The main cost advantages of “low-cost airlines” come from high density of seats, use of secondary airports, minimal costs in hard standing, essential flight services, and no agency commissions. Therefore, none of this cost advantage comes mainly from the Internet.

Differentiation through Internet in airlines

During 2004, the rapid growth of e-transactions and the rapid change of Airtransport Intelligent Systems – such as GDS - have forced the airlines companies to adapt their internal technology system to these new requirements from the market.

In addition, the growing demand for on-line products and the implementation of intelligent air transport systems directed towards the supply of a diversified range of products and services have supported the Internet transactions growth into tourism sector. In 2004, the sudden increase of air traffic on world basis (IATA, 2004) and the related increase of electronic transactions also forced airlines to adapt technology to these new market requests. Hence, the development of the Internet channel, consumers behaviour is radically changed (Mills & Law, 2004). Before the Internet, customers had no other choice than travel agencies or airline companies channels.

The first evolution is about variety. Through the Internet, travellers can have direct access to a greater amount of information provided by tourist organizations, private companies and, in an increasing way, by other users; limiting in this way the use of traditional intermediaries. Search engines are obviously one of the greater sources of customers benefits. Indeed, from information search, to destination research, to on-line buying of air tickets and hotel booking, even up to post sale services, Internet allowed to increase the information symmetry, by reducing searching time and simplifying and improving the purchasing processes of tourist products and services. Searching has become a meaningful part of decision and purchasing process, especially for experienced users. During decision stage, searching allows to choose the optimal destination according to the best quality and price ratio and, afterwards, during the trip, to obtain crucial information on times, destinations and other additional services. Therefore, these experienced users have access to more unique and “hidden” offers than those who are still using travel agencies and stick to the “catalogues” offers.

Buhalis (1998, 2004) affirms that currently potential tourists are more independent and sophisticated and they use a wide range of tools to organize their trips.

Namely, these include on-line booking and purchasing systems (as airlines and tour operators), travel intermediaries (like Expedia, Opodo), search engines and meta-search engines (like Google and Kayak, respectively), Destination Management Systems (DSM), social networking and 2.0 web portals, and price-comparison sites (like Kelkoo).

On-line users recommendation is one of the features of tourism industry. The development of Internet or Travel 2.0 applied to tourism sector has allowed transferring the concept of social networking and virtual communities to airline market. A best practice in this field has given by TripAdvisor (www.tripadvisor.com) that is among the most successful virtual community sites in tourism sector and it supports hotels review from all over the world and allows to meet people into forums through a powerful platform for virtual interaction, which is also directly fuelled by the end user (Fesenmaier & Wang, 2004b). The Internet has changed the market rules, considering that it is a potentially infinite sale and distribution channel, able to reach users around the world, and at relatively low costs.

Therefore, Internet in European airlines seem to meet the main characteristics of the Long tail phenomenon: product variety, consumer surplus, niche markets, searching tools, on-line recommendation and experienced on-line users.

CONCLUSIONS

This paper analyses the question of the “airline paradox” in Europe. This paradox is twofold. On the one hand, while in hyper-competition, corporations are supposed combine rather to separate low-cost and differentiation strategy, the division between “low-cost airlines” and “Network

carriers” seemed to contradict this statement. On the other hand, while Long tail theory predicts that Internet would deliver more consumer surplus than cost reduction in airlines, in airlines industries cost reduction seemed to be the dominant effect of the Internet (Smith et al 2001).

In this paper, we argued that “low-cost airlines” represented also differentiation and that “Networks carriers” were also reducing cost.

- Indeed, cost is not the only feature of “low-cost companies”. These companies focus on new routes which are not served by the main airline companies. They are also using secondary airports (Pels, 2008). Therefore, there is clearly an element of differentiation in the “low-cost” model. “Low-cost companies” are in the same time reducing cost and promoting differentiation with their new routes not used by Network companies
- On the other hand, Network carriers also try to reduce cost, especially through rationalization of operations, penetration within new markets and development of own hubs (Spinetta, 2004). According to Pels (2009), through the hub and spoke networks, airlines may freely define the optimal network and, in many cases, define their own hub and spoke network in order to exploit density economies; in this way the cost per seat/passenger decreases, on the increasing of the number of seats or passengers.

The company conducts a portfolio strategy for two distinct markets:

- in front of low –cost competitors, the strategy will focus on cost reduction – i.e. point-to-point system, exemplification of the tariffs system, advanced booking, contained industrial costs, but not equalling other low-cost carriers –
- In front of network carriers the focus becomes the development of complementary services such as fast track, VIP room, diversity of departures time (such as the route Verona-Rome where the main competitor is Alitalia);

The important point is that this cost versus differentiation choice also depends on geography.

- For domestic routes, Meridiana focuses on cost
- For long-distance routes, Meridiana focuses on differentiation

About the technological aspect of the paradox, Internet in European airlines seems to meet the main characteristics of the Long tail phenomenon: product variety, consumer surplus, niche markets, searching tools, on-line recommendation and experienced on-line users. Indeed, tourism industry is one of the protagonists of the long tail through the multiplying of technological platforms regarding selection, booking and payment of trip, as well as expressively dedicated blogs and communities, have changed this sector into one of the most advanced actors of transformation.

Future developments of this research should consider how the Long tail allows innovative ways of marketing such as “buzz marketing” relying on word of mouth, “new media marketing”, especially through social networks and virtual communities and “viral marketing using social networks in airlines. It should also investigate the "crowds" of customers, users and small companies that inhabit the Long Tail distribution can perform collaborative and assignment work. Some relevant forms of these new production models are the peer-to-peer collaboration groups that produce open-source software or create wikis such as Wikipedia, the crowd-sourcing model, in which a company outsources work to a large group of market players using a collaborative online platform and the “crowd-casting”. The latter is the process of building a network of users and then delivering challenges or tasks to be solved with the purpose of gaining insights or innovative ideas.

Acknowledgements

References

- ARGOTE, L. (1993) Group organizational learning curves: individual, system and environmental components. *British Journal of Social Psychology*, 32, 31–51.
- ARGYRIS C., SCHON, D. (1978) *Organizational Learning: A Theory of Action Perspective*. Reading, Ma: Addison-Wesley.
- ANDERSON, A. (2004) *the long tail*.
- BARRETT, S. (2000) 'Airport competition in the deregulated European aviation market', *Journal of air transport management*, 6, 13-27.
- BRYNJOLFSSON, E, HU, J. and SMITH, D. (2003) Consumer Surplus in the Digital Economy, *Management Science*, 49, 11.
- BRYNJOLFSSON E, HU, J., SMITH D. (2006) From Niches to Riches: Anatomy of the Long Tail, *Sloan Management Review*, Vol. 47, No. 4, pp. 67-71, Summer 2006
- BRYNJOLFSSON, E., HU, J., SIMESTER, D (2007) Goodbye Pareto Principle, Hello Long Tail: The Effect of Search Costs on the Concentration of Product Sales, *MIT working paper*, SSRN: <http://ssrn.com/abstract=953587>.
- BURGLEMAN, E. A. (1991) Intra-organizational Ecology of Strategy Making and Organizational Adaptation: Theory and Research, *Organization Science*.
- BUHALIS, D. (1998) Strategic use of information technologies in the tourism industry, *Tourism Management* 19, 3, 409–423.
- BUHALIS, D. (2004) Airlines: strategic and tactical use of ICTs in the airline industry, *Information & Management*, 41, 805–825
- BURNS, T. - STALKER G.M. (1961) *The Management of Innovation*. London, Tavistock.
- DAFT, R.L. (1978) A Dual-Core Model of Organizational Innovation. *Academy of Management Review*, 21, 193-210.
- DAFT, R.L. (2007) *Organizzazione Aziendale*, III Ed., Apogeo
- DECASTRI, M. (1998) Visione strategica e innovazione organizzativa, *Sviluppo e organizzazione*.
- DELLA CORTE, V. (2009). Imprese e Sistemi Turistici, *Egea, Milano*.
- DE MARCO, M. (1998) L'organizzazione dei sistemi informativi, *Il Mulino, Bologna*.
- DOGANIS, R. (1983) "Economics of European airports", Transport Study Group report, n. 9.
- DOGANIS, R. (2006) *The airline business* London, *Routledge*.
- DRUCKER, P. F. (1992). The new productivity challenge, *Harvard Business Review*, 69, 69-79.
- ENZ, C. A., CANINA, L., WALSH, K. (2006) Intellectual capital: A key driver of hotel performance, *Report by Centre for Hospitality Research, Cornell University*.
- EUROPE POLICY COMMITTEE (1999) "European airports: a competitive industry".
- EUROPEAN COMMISSION, DG TREN ASSESS (2005) Assessment of the contribution of the TEN and other transport policy measures to the mid-term implementation of the White Paper on the European Transport Policy for 2010. Final Report.
- EUROPEAN COMMISSION (1992) Regulation (EC) No. 2408/92 Access for Community air carriers to intra-Community air routes, *European Commission acts*.
- EUROPEAN COMMISSION (2004) Regulation (EC) No 549/2004, *European Commission acts*.
- EUROPEAN COMMISSION (2004) Regulation (EC) No 550/2004, *European Commission acts*.
- EUROPEAN COMMISSION (2004) Regulation (EC) No 551/2004, *European Commission acts*.
- EUROPEAN COMMISSION (2004) Regulation (EC) No 552/2004, *European Commission acts*.
- EUROPEAN COMMISSION (2008) Regulation (EC) No 1008/2008 Common rules for the operation of air services in the Community, *European Commission acts*.
- EUROSTAT (2004) Impact of September 11th on air passenger transport.
- FITZGERALD B., FELLER J. (2000) A Framework Analysis of the Open Source Software Development Paradigm.
- HANNAN M.T., FREEMAN J.H., (1984), Structural Inertia and Organizational Change, *American Sociological Review*.
- HANNAH S. T. LESTER PAUL B (2009) A multilevel approach to building and leading learning organizations, *The Leadership Quarterly* 20, 34–48.
- KANTER, R.M., STEIN, B.A., JOCK T.D. (1992) The challenge of organizational change: How, companies experience it and leaders guide it, *Free Press, New York*.

IATA (2003). A review of air transport following September 11, IATA.

IATA(2003). Passenger forecast 2003-2007, IATA.

IATA (2009) issues forecast for 2009, IATA.

LAM A.(2004), Organizational Innovation, Brunel University. Brunel Research in Enterprise, Innovation, Sustainability and Ethics; working Paper n.1.

JOHANNESSEN J.A., OLSEN B., OLA J. (1999), Aspects of innovation theory based on knowledge-management. *International Journal of Information Management* 19, 121-139.

LAWRENCE P.R., AND LORSCH J.W., (1967) Differentiation and Integration in Complex Organizations, *Administrative Science Quarterly*.

LEWIN, A.Y., C.P. LONG AND T.N. CARROLL (1999) The Co-evolution of New Organizational Forms, *Organization Science*.

MINTZBERG, H. (1979) The Structuring of Organization, *Englewood Cliffs, N.J. Prentice Hall*.

NANDHAKUMAR, J. (1997) University of Southampton; Matthew Jones, University of Cambridge, Designing in the Dark: The Changing User-Developer Relationship, *Information Systems Development*.

NONAKA, K. (1991) The knowledge creating company, *Harvard Business Review*.

NONAKA, I. (1994) A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*.

PELS, E. (2008) Airline network competition: Full-service airlines, low-cost airlines and long-haul markets, *Research in Transportation Economics*, Volume 24, Issue 1, 68-74.

PORTER M.E. (1979) "How competitive forces shape strategy, *Harvard business Review*, March/April 1979.

PORTER , M.E. (1980) *Competitive Strategy* Free Press, New York, 1980.

PORTER, M.E. (1985) *Competitive Advantage*, Free Press, New York, 1985.

PYO, S. (2005) Knowledge map for tourist destinations – needs and implications, *Tourism Management*, 26, 583–594.

RINDOVA, V., KOTHA, S. (2001) Continuous morphing : competing through dynamic capabilities, forms and functions, *Academy of Management Journal*, 44, 6, 1263-85.

ROMANELLI, E., TUSHMAN, M.L. (1994), Organizational Transformation as Punctuated Equilibrium: An Empirical Test, *The Academy of Management Journal*.

ROSSIGNOLI C. (2004) Coordinamento e cambiamento, *Tecnologie e processi interorganizzativi, Ed F. Angeli (collana Informatica e organizzazioni), Milano*.

SADLER, P. (1988) Managerial leadership in post-industrial society, *Aldershot, Hants: Gower Publishing Company*.

SENGE, P.M. (1990) *The fifth discipline. the art and practice of the learning organization*. New York: Doubleday/ Currency.

SHAW G., WILLIAMS A. (2009) Knowledge transfer and management in tourism organisations: An emerging research agenda *Tourism Management* 30, 325–335

SCHUMPETER, J. (1950) The process of creative destruction, *J. Schumpeter (ed.), Capitalism. Socialism and Democracy*, Third Edition, London: Allen and Unwin.

SMITH, B., GUNTHER, D., V. RAO, AND RATCLIFF, R. M. (2001) e-Commerce and Operations Research in Airline Planning, Marketing and Distribution, *Interfaces* 31, 2, 37-55.

SPINETTA J. C., (2004) "Consolidation in the European Airline Industry: The Single Market a Decade Later", *Conference at Columbia University*.

SVEIBY, K.E. (1997). The new organizational wealth: Managing and measuring knowledge-based assets, *Berrett-Koehler, San Francisco*.

VOLBERDA H.W (1996) Towards the flexible form: How to remain vital in Hypercompetitive environments; *Organizational Science*, 7, 4, 359.

WELCH, J. (2001) Timeless principles, *Executive Excellence*, February, 21.

SALVEMINI S.(1995) Gestire le crisi partendo dal futuro, *Egea, Milano*.

SIMON, H.A. (1991) Bounded Rationality and Organizational Learning, *Organization Science*.

VELLO P. M.(1995) L'impresa del terzo millennio: Come pensano e agiscono le learning organizations, *Ed. Franco Angeli, Milano*.

UNITED NATIONS (2002) General Secretary Report, *United Nations Conference, Geneva*.
VULKAN, N. (1999) Economic implications of agent technology and e-commerce, *Economic Journal*.