

Company Innovation and Redefinition of Strategic Optic: Business - Model in the Air Transportation

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Abstract: *This work aims to analyse the close relationship between innovation of product / service and corporate business model in order to understand the dynamics of the relationship.*

Various contributions from literature showed how the concept of innovation within the company has evolved over the years and what were the approaches used to study it. This analysis begins with the study of the contributions of Schumpeter, the first economist to write about innovation and author of the dynamic development model and creator of the first distinction between innovation and invention. His theories have made a major contribution in this area, but none the less were also constructively criticized by other economists such as Freeman, who introduced the concept of incremental innovation and analysed the factors triggering innovation.

Albernathy and Clark then added another fundamental element of analysis: the competitive environment. They studied the influence of innovation on those factors that are considered essential to achieve a competitive advantage. The same Albernathy, with Utterback, then studied the dynamics of innovations over time. Each of the cited authors analysed the phenomenon of innovation in a different light and all of their contributions allows for a broad and comprehensive concept.

The picture is completed by adding the recent contributions of Christensen, who has taken up and deepened the concepts of "sustaining innovation" and "disruptive innovation" and, especially, began to highlight how essential it is that innovation is supported by a suitable business model. In this regard, he has shown that even the same business model can be object of innovation and that this type of innovation is one of the main drivers of the creation of competitive advantage.

With the advent of the knowledge society, new opportunities, business models and concepts have emerged in most industrial sectors and in particular in the transport sector. The European air travel market, dominated by airlines, influenced to varying degrees from their countries of origin, has been, since the early nineties, completely revolutionized by the entrance in the competitive arena of several small companies, which, in accordance with the principles of 'disruptive innovation', have completely changed the field of passenger transport.

To understand how this was possible, it is necessary to investigate, just with the help of these new tools of Strategic Management as the business models, about the way in which these airlines are able to generate their business and create value.

Keywords: *Business – model, strategic management, innovation, competitive advantage.*

1. EVOLUTION OF INNOVATION CONCEPT

The first economist to handle with the subject of innovation in a wide way is Joseph Aloes Schumpeter who supplies literature with an undoubtedly valuable contribution, starting from which all the subsequent theories regarding innovation develop themselves.

Schumpeter exceeds the static model of general economic balance proposed by the economist Leon Walrus, introducing a dynamic conception of economy. This theory has the capability of catching the irregular changes, which the theory of general economic balance is not able to explain but which, according to Schumpeter, are to consider essential because they represent the core of economic

development. Pursuant to the dynamic conception, the entrepreneur, thanks to the assets, which his creditors make available, satisfies the evolution of market request introducing new products, opening new markets, using new technologies and changing production modalities. Innovation, then, assumes the role of principal determiner of industrial change, of force that destroys the old competitive contest to open a completely new one.

Innovation then is a “concrete answer which verifies anytime economy, a sector or some companies of a sector offer something different, something which is beyond the existing practise” [*Schumpeter, 1934, p.68*]. It differs from the invention that instead consists of the assembly of a discovery of a mainly scientific and technological nature that is only potentially useful from an economical point of view. The inventors attention is therefore in science and technology as knowledge’s assets. Besides, innovation does not derive necessarily from an invention and, differently from the latest one, allows taking a commercial advantage defined as monopolistic asset from innovation. This asset is steady in time only if the innovative activity of the company is continuous; on the contrary it vanishes because of the competitive reaction of other companies. According to Schumpeter, the entrepreneur is the innovator for excellence, who combines in a different way the production means “to make something new” and obtain an income. The entrepreneurs in fact complete creatively installations, competences and materials to realize a new product, to test new productive methods or to exploit new markets.

Freeman, English economist, even if he admits that Schumpeter has the capability to catch the conceptual distinction between innovation and invention and has the value to have shown a distinction which has then influenced all the following theories, believes that the idea that innovation and invention follow singular developments, far away one from the other, is wrong and deceptive. He believes that innovations and inventions, in fact, interact one another, superimposing and integrating himself. Once a innovation is put on the market, beginning then its process of diffusion, its development will be able to be marked by subsequent inventions, the author writes: “As in the diffusion process we have further incremental innovations, as the development step of innovations often is associated to new inventions”.

The conclusion to which Freeman gets is then that innovations, inventions and diffusion processes have a high degree of interaction and do not follow the developments, which Schumpeter had theorized. The theories of the two economists are then counterpoised, according to Schumpeter’s point of view, innovation and invention spread following independent paths, according to Freeman’s vision in which, instead, innovation is in continuous interaction with the multiple inventions and from which their diffusion springs.

Abernathy e Clark, in 1984 with the paper “Innovation: mapping the winds of creative destruction” [*Abernathy, Clark, 1984*] pursue the aim of formulation framework focused to classify the different role which they cover in a competitive sphere. In the first part of their work, the authors identify some criteria to classify the innovations on the grounds of the possibilities they have to obtain a competitive advantage related to their competitors. To understand this, the starting point is that the achievement or not of a competitive advantage depends on the takeover and on the development of determined capabilities, relationships and resources. Innovation plays an important role in the obtaining those skills from the company, and the positive o negative weight, which it will be able to have in doing so, will determine its importance. To understand this process as best as possible, Abernathy and Clark consider the competitive position of a company on the round of aspects that characterize a determined product/service. Each product of the company is in fact composed by heterogeneous characteristics. The company will compete with its own competitors for every characteristic which the product has, for example, it will clash with the design of competitors products, with their usage easiness, with their

initial costs, with their respective immediate availability in the market and so on. The competitive advantage compared to their own competitors will rise when the company will excel at one of these dimensions or at one combination of them related to the other offered products. The authors underline how is important not to mistake the source of this advantage for the characteristics of the product or for the position occupied by the company; both infect are the result of something internal to the company, or of the union of material resources, human and relational abilities; this represents the whole that the authors call “competitive ingredients”, that is the ingredients thanks to which the company builds its own offer. The competitive ingredients are then the real source of the competitive advantage on which innovation can impact, increasing or decreasing it by virtue of what Abernathy and Clark call “transience”, that is the innovation’s ability of influencing the resources, the knowledge’s and the skills which the company holds.

Differentiation between products innovation and process innovation, proposed for the first time by Schumpeter in 1934 in “Theory of economical development”, is started again by Abernathy and Utterback who, in their work “Patterns of industrial innovation”, propose a model where products’ innovations and process’ innovations evolve in an interdependent way marking three distinctive steps, each of which is differentiated for the sector’s structure and for those that can be the sources of the competitive advantage □Abernathy, Utterback, 1988□. Abernathy and Utterback, dealing with the subject regarding the correlation between competitive environment and innovation, take again the work that Abernathy himself had developed together with Clark, but giving it more dynamicity. The model reveals itself infect interesting either for the dynamicity which it gives to the concepts product innovation and process innovation, or for the ability it has to link strictly one each other these innovations to the competitive environment and to the organizative structure.

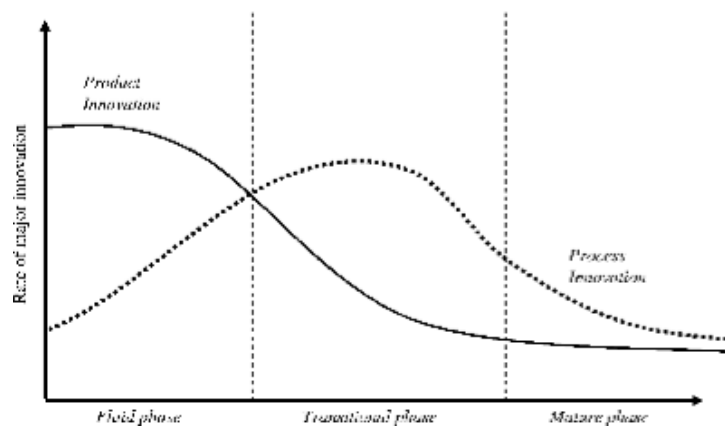


Fig1. Abernathy and Utter back’s model, [Abernathy, Utterback, 1988]

Fig 1 represents the model whose vertical axis describes the innovation level, while the horizontal axis points out the flying of time. The authors analyse in detail each of the three underlined stages, which are respectively:

- Fluid stage;
- Transition stage;
- Maturity stage (or specific stage)

Each of these stands out because of different level of process’ innovations and product’s innovations.

- *Fluid stage*: In this first stage the environmental uncertainties of market and technology prevail, therefore no company is able to impose a standard, several little changes exist which bring into the market several innovative solutions, each of whose satisfies limited segments. Every company

proposes to the market its own offer and the results can vary significantly from company to company because there is no homogenization of the several proposals; in this stage, therefore, competition is grounded on the differentiation of the products, besides there is almost no process' innovation. The productive process, in fact, is based on highly qualified labour and on equipment's of general use. Competition will not be so tough as in the following stages, in this moment companies do not know yet which will be the applications that they will be able to articulate from the proposed innovation, nor the answers that they will obtain from the referring market and nor the directions to which market could grow. The suppliers' bargaining power is low, because for the production no specific resource is used. The principal threat comes from the old technology and from the potential entrance of new operators who could catch the opportunity to develop a new offer.

- *Transition stage*: In this stage the various technologies born during the first stage coincide toward a prevailing design, which will become the standard referring solution and, then, will reduce the great uncertainty of technology and of market, which exist in the first stage. The knowledge, which producers have of characteristics of dominant solution, will grow, so as the awareness of the consumers' needs, all the producers will tend to comply with the emerged standard. Previously to the reaching of this stage's maturity, companies, if they want to obtain monopolistic incomes, have to respond to the target of winning the battle, imposing their own solution as the dominant one, transforming thus the own offer in the referring product/service. Should this not happen, every company can anyway begin to develop complementary products or improving versions of the now dominant product/service. Fig. 1 shows how, in this stage, the investments in process' innovations exceed those in product's innovation, continuing to grow to a point where the company believes to have done any pursuable effort in order to obtain some improvements in the productive processes. The threat of new incomings is present, but these will meet more barriers to the entrance compared to the previous stage.

- *Specific stage*: In the specific stage the companies compete on the product's performance, and its costs, the process' innovations then will be dominant related to the product's innovations. The companies have a clear idea about the market segments to which they can refer, about their needs and the most suitable way to satisfy them in terms of services and relation modalities. The used equipment's are highly specialized, the qualified labour's usage is less important, thanks to the greater knowledge's held by company and given by the learning economies. This implies an increase of the suppliers' bargaining power. In this stage the competition becomes more intense and market moves to an oligopoly. It will end up when a new innovation will replace in market turning it upside down and bringing it back to the fluid stage and then to the experimentation of new non-standardized solutions.

Even if it suffers from some limits, the Abernathy and Utter back's model has given a great contribution to literature thanks to the capacity it has had to develop a correlation among typology of innovation, its rate of development and time. It remains a very good starting point for an analysis of the company's development and its innovations throughout the years.

With the term *disruptive innovation*, Clayton M. Christensen, American economist, refers to all those products or services which at the beginning address themselves to a niche market, but in a second time manage to expand in the whole market, dethroning the products or services which had occupied a leading role until that moment. This concept has been introduced by the economist for the first time in 1997 but, even if much time has passed, it remains valid nowadays also thanks to its skill of bringing back past fundamental concepts; it is possible, in fact, to compare it to the *architectural innovation* shown in Abernathy and Clark's model, so as to the Schumpeterian concept of creator destruction. But unlike the latest one, the la disruptive innovation is not seen by the author as a singular event whose

existence sets aside from the will and plans of company, on the contrary, Christensen encourages the entrepreneurs to look for implementation of this kind of innovation, when company has something to do with some market conditions. The market dynamicity in fact can create the conditions so that the problems, that a company has to face, evolve, the competitive environment modify itself by virtue of the new incomings, and the final consumers' needs develop themselves, modifying compared to those which the company has faced till then. In a situation of this kind, it is essential that the company is able to question itself and asks itself if the way in which it has answered to the problems till that moment and the resources that it has used to do it, can still be suitable to manage the new changes. For the success companies this can be very difficult, because, when determined *skills* are integrated for some time in the company's processes, questioning them can be hard. This kind of companies, besides, results to be perfectly able to face the developmental changes, or those that do not need to turn upside-down its own operatively, to use different resources and capabilities and to create relationships with unknown markets. The successful companies, usually, face the developmental changes through implementation of what Christensen calls *sustaining innovations*, or the innovations which exploit abilities, capabilities, values and processes already settled inside the company and that allow a product or a service to obtain better performances in traditional market. It is nearly always the sector leader companies which introduce the *sustaining innovations* but these companies themselves, just when a *disruptive innovation* would be suitable to answer the happened changes, do not manage to renovate and leave room to all the start-ups and to the new incomings which, on the contrary, are able to catch important changes with better flexibility and quickness.

When the changes of market, the competitive situation and the referring environment's evolutions ask to actuate a *disruptive innovation*, the company will need new abilities, new values and new processes sustained by different resources respect those utilized till then. According to the author, three ways exist to put into operation these changes:

- 1) To create a new organizing structure inside the bounds of company where the new processes are developed and where the new requested values are present;
- 2) From the new company to let an independent company bloom this develops the requested capacities to face the desired change;
- 3) To purchase an external company whose values, whose processes and whose resources are coherent with those requested of change.

Once understood which can be the obstacles that prevent the company to renovate itself and which is the better way to be able to do it, it is necessary to wonder if the *disruptive innovation* that one would like to implement can answer the final customers' needs.

Christensen, in fact, believes that the critical point, able to determine if a potentially disruptive innovation can effectively turn into it, settling into the market, does not regard the substantial characteristics of innovation itself, but the link between these and the demands of referring market. To get to this thought he had studied the failures of some companies which, though holding in their offers portfolio particularly innovative products of services, were not able to succeed because they were totally incoherent with the latent needs of the final market.

Another sphere of in-depth analysis regards the dynamic of revolutions of companies or whole markets caused by innovations, which, for the above-mentioned characteristics, have had the capability to do it. Studying these dynamics Christensen has identified three elements, which can be present to make the revolutions possible:

- The first, known "technological enabler" regards the type of innovations able to make simple the problems, which originally were complicated and expensive;

- The second is a “business model” dedicated to sustain this kind of innovation, that is able to spread it in a market for which it can be successful;
- The third element is the creation of an “actor network”, a whole value chain that is a support for innovation, to do what it is necessary that the involved actors have a coherent economical model; only in this way all will be stimulated to reach the same goal.

These three elements not only must be present at the same time, but also in a continuous way, that means that the companies should have as a goal that of investing constantly for obtaining all the three shown elements, if one of these lacks the innovations could fail.

From this latest point comes the importance that Christensen gives to the business models, which sustain innovation. He thinks that this subject has as the same importance as that given to innovation, knowing that, if it lacks of a brilliant business model, which sustains and markets it, its success is destined to fade.

2. THE CONCEPT OF BUSINESS MODEL AND THE INCREASE OF ITS RELEVANCE THROUGHOUT THE YEARS

The concept of business model has spread starting from the nineties, when the interest dedicated to it has grown more and more and around it publications, books and articles in specialized magazines have bloomed. With the passage of the years the exponential growth of the concept has been such as to catch the attention of several academics that have gone to examine the evolution throughout the time.

The growing interest in the sphere of business models can be justified only by a whole of with-causes, which have acted at the same time. The interaction of different factors such as the arrogance of web network in acquiring more and more relevance in people’s and organizations’ life, the use of innovative technologies which have multiplied themselves and specialized in the years, the growth of emerging markets and a constant evolution of globalization processes, has determined that the interest to business models war much more stronger, not only in the researchers’ and academics’ mind, but also inside the companies and organizations which have seen come up in their referring market new competitors whose principal strength was that of being based and implement an innovative business model. This justifies the explosion of the term’s recurrences and this trend, being caused by different with-causes which live one on the other, very unlikely will vanish in future.

Facing the countless written contributions on the subject of business model, as many definitions have been given and various classifications of the concept have been assumed.

The used terms in definitions of business models have been the most varied, amount the principal we remember:

- Statement or description [*Stewart, Zhao, 2000; Applegate, 2000; Weill, Vitale, 2001*];
- representation or *model* [*Morris, Schindehutte, Allen, 2005; Shafer, Smith, Linder, 2005; Amit, Zott, 2001*];
- architecture of referring drawing [*Dubosson-Torbay, Osterwalder, Pigneur, 2002; Timmers, 1998; Brousseau, Penard, 2006*]
- whole of management’s tools or method [*George, Bock, 2009; Osterwalder, 2004; Afuah, Tucci, 2001*]
- structure or set [*Afuah, 2004; Seelos, Mair, 2007*].

The existing definitions from one side have enriched literature of different points of view, from the other side have brought a general confusion which, added to the missed definition of other authors,

has allowed that, nowadays, even existing a wide interest in the subject, a definition of business model universally accepted does not exist. As Atri and Braccini write : “at the current state, unanimous consensus about a shared definition of Business Model is lacking, and the necessity emerges of deepening the empiric research in this sector. Recent research works, trying to reassume and consider all the previous positions, have proposed the adoption of ontologies for derivation of a definition of shared and sharing Business Model ” [Braccini, 2008].

3. BUSINESS MODEL BETWEEN ACTIVITY SYSTEM PERSPECTIVE AND DYNAMIC PERSPECTIVE

The first approach comes from considering two different visions of concept of business model: the static approach, described by Activity System Perspective, which defines business model as a whole of activities [Zott, Amit, 2010; Amit, Zott, 2001] and the second is that of dynamic approach, taken by Dynamic Perspective, which exposes an idea of continuous change of business model. In this perspective the transformation is caused by business model itself that is then defines as tool bringing change and innovation [Demil, Lecoq, 2010].

In the first approach Zott e Amit, after various researches and being based on several developed works, [Zott, Amit, 2001; Zott, Amit, 2007; Zott, Amit, 2008; Zott, Amit, 2009] summarize the ideas reached throughout the years, conceptualizing the business model of a company as a system of interdependent activities which transcend the company going beyond its boundaries [Zott, Amit, 2010]. The business model, gushing from the drawing of activities’ system, is the fundamental analysis unity, because it allows the creation of value and appropriation of a percentage of this latest from the company.

The sum of all the different activities creates an interdependent system which has as a goal the creation of value for the participating actors, in other words, the company, its partners, the salesmen, the distributors, the clients etc. The interdependence among activities is a fundamental characteristic of concept of activity system, it comes thanks to the entrepreneurs and the managers who decide which activities will have a role in business model of company, and how they will be linked one to the other. The activities and transactions among the, inside and outside company’s boundaries, form the pattern of business model, that is its essence [C.Zott, R.Amit , 2009]. Some of these activities are implemented by the company, others by its suppliers, by its partners of by its clients; the role that the company covers inside its referring environment depends on the activities that it decides to implement and on how these link it to its network. These choices are key-decisions for the company’s future, in fact, once business model is chosen and implemented, changing it will be able to bring some difficulties because of the presence of various resistance factors to the change.

3.1. Activity System Perspective’s Advantages

The activity system perspective presents the business model as a whole of activities which distribute value to the involved actors in the model. Besides, it explains how the different activities are correlated one with the other, outlining with it its structure and the respective governance. The created value comes from four principal possibilities: novelty, lock in, efficiency and complementarities. These four possibilities are not four different ways but they are correlated and placing on top one among the other.

The approach activity system, highlighting as first thing the business model’s activities, seems proposing to the managers a natural viewpoints, because it is based on an object, the activities, in which they already show interest taking most of their decisions.

In the second place, following the approach activity system, the managers will have a total view of the singular activities, thanks to which the consequences of every singular choice will be immediately

clear, on all the activities influenced by it. The authors put the stress on this point saying: “The message to managers is clear: look at the forest, not the trees, and get the overall design right, rather than concentrating on optimizing details” [Zott, Amit, 2010, p.223]. This takes a third advantage: the shown holistic vision highlights the involved relations in process and in transactions, giving their management an importance which other viewpoints omit.

3.2. Dynamic Perspective

A more dynamic approach to the concept of business model has been proposed by B. Demil and X. Lecocq in their work “Business model evolution: in search of dynamic consistency” [Demil, Lecocq, 2010]. The goal of this work is that of filling the existing gap between two different approaches to the business model: activity system perspective (called by the authors “static approach”) and the “transformational approach”. The authors’ attention, in fact, is focused on the continuous change of business models examined thanks to the integration of two approaches that, even proposing different points of view, are not seen as opposed, but as two complementar models which, pursuing different goals, allow a more exhaustive vision. This also because, if from one side the two approach propose two interesting visions, from another side both have some weakness points which their union can reduce.

In the “static approach”, as previously exposed, the business model of a company is understood as a whole of different activities which it develops, whose interaction and whose functioning mechanisms allow to create value. B. Demil and X. Lecocq assert that this approach, apart from allowing an easy description of different types of business models grounded on the activities which compose it, permits to study the relation between business model and the company’s performance. It, if from one side proposes an analytical and interesting vision, from the other side does not interest itself of the analysis about the evolution business model can suffer through the time. This is instead the goal of “transformational approach” which defines business model as “a concept or a tool to adress change and focus on innovation, either in the organization or in the business model itself” [Demil, Lecocq, 2010, p.229]. The central point of this approach is then the change which gives movement to the model meticulously described by “static approach”, examining thus the actions and the changes of the business model through time.

3.3. Advantages of Dynamic Perspective

The constant dynamicity focused by Demil and Lecocq gets things in such a way that their theory keeps the “Configurational perspective literature” at a distance. In fact, unlikely this la test, it does not believe the identification of a finite list of business model’s elements is possible, and neither it is possible to define a best combination of resources, the best organization or proposition of more profitable value. Recognizing the imbalance inherent in business models, Demil and Lecocq believe that new configurations always are possible, so as the addition of new resources, new skills and new relations among them; the managers, aware of this status of eternal evolution, have to supply themselves with tools, skills and capacities which allow them to adopt strategies of continuous change of their business model. In fact, they close affirming, “*The open ended interactions between core components and managers’ entrepreneurial initiatives mean business models are always changing, and managers must monitor consistency to ensure sustainable performance*” [Demil, Lecocq].

As a consequence of new American process of liberalization, also in Europe at the beginning of the 80’s a gradual process of liberalization start up, due to a renegotiation of the bilateral agreements between Great Britain and Netherland and among Great Britain and Netherland and Ireland.

Other Countries, in the wake of the above-mentioned ones, introduce forms of competition, convinced

of the idea that to liberalize can bring benefits to consumers with the creation, thus, of a unique market of air transportation. Successively the European Council of Ministers passes three normative regulative packages for the sector of air transportation.

With the package of December 1987, a much less binding price regime is introduced and the possibility of preventing anticompetitive alliances.

The second package of June 1990 relaxes further on the bonds on taxes and on the access to the markets while the third, become effective in 1993, creates a regime of open skies with which all the vectors can now land in any airport of European Union.

The communitarian air vectors have the faculty of lending intracommunitarian air neither without subduing their performances to any permission or authorization nor being limited by bilateral agreements among Member States.

The limitations can only be imposed in a framework of bilateral agreements between a Member State and a third State, although they do not limit the competition, are not discriminatory and are no restrictive more than the necessary.

If by half of the 90's, two courses out of three on the European segment were served only by one vector, less than 30% by two air companies, and only 6% by more than two, in the following years the best degree of competition introduced by communitarian politics has determined a considerable increase in the offer of connections, with a bigger number of vectors and the growth of fee range.

4. THE BUSINESS LOW-COST MODEL

The *low cost* companies have remodelled the competitive scenery with the liberalized markets and have had a significative impact on the market, which was totally controlled by networks of full service.

All this has been possible formalin an offer with flights and services at lower prices than the average of their own competitor, trying to beat the competition of traditional vector operating in the same market.

With a closed control of internal and external costs and an offer structure oriented to the complete elimination of secondary importance services destined to the clients passengers, the air companies, even called *low fare* try to obtain a cost leadership through the adoption of techniques, processes and procedures which distinguish them.

The costs reduction remains the *core* aspect of low-cost vectors strategy with a business model which has as last goal that of let the passenger save, offering low fares and eliminating those comforts and services that before then the traditional operators offered.

The principal characteristics of low cost services, which allow the companies to have extremely cheap cost advantages with, the competitors are:

- Configuration of the aircraft with the most number of places available.
- Fleet composed by a sole aircraft model to compress the costs of maintenance and of personnel training.
- High intensity of fleet's use.
- Stimulation for the employees with productivity bonus
- Multirole of the company's employees.
- Minimization of use of land personnel.

- Reduction of expenses for accommodation for personnel on business
- Administration characterized by Lean Management,
- Elimination of free meals on board
- Expenses savings through direct distribution,
- Adoption of strategies of fuel hedging,

Clients who are served by *low cost* air companies are extremely sensitive to price, but despite this, the profile of consumer of *low cost* society's services has started an evaluative process towards business customers, letting the intensity of competition between full service and *low cost* vectors grow excessively.

Passengers can be moreover *time-sensitive passengers* or *non time-sensitive passengers*.

The first are those travellers for who travel time and services regularity constitute substantial attributes of services differently from the considered second category.

Time-sensitive passengers are tangentially businessmen who prefer travelling (for need) during weekdays and who are less sensitive to price than a tourist who is more sensitive to the fee variations.

In conclusion, the factors, on which the demand's elasticity depends, are passenger's time availability, the connections' length and the competition exercised on single courses.

Starting from the business model of low cost vectors, we can make a comparison about how instead the full service carrier conceive the commercial, technical and organizative aspects of their activities differently from how the low cost companies instead behave.

Even though it is difficult to generalize, because some of low cost were born on the American model of Southwest Airlines while others are the result of an organizative evolution of vectors which acted with the historical model or of a reorganization of charter companies.

4.1. Comparison of Costs Among Vectors' Typology

It is immediate the difference in costs of personnel between LCC and FSC. The model of low cost business is characterized by a slightest use of land personnel, by a flexibility of employee who cover different duties inside the organization and by very reduced costs for the low number of travel allowances.

From this derives that workers' productivity is very different; every employee of a low cost vector "transports" on average nine times the passengers of a traditional vector. The costs for personnel of traditional companies are almost six times greater than those of low cost companies.

The costs of maintenance, instead, reach 0,47 cents for full service model and 0,26 cents for low cost model. The difference, anyway, is not due to a different security level, but to the fact that low cost vectors' fleet is composed by more recent and equal aircrafts.

The airport and navigation expenses are always lower in case of low cost model with a cost per place and offered kilometre equal to 1,59 cents against 1,86 cents for full service. The navigation costs, instead, cannot differ for their nature because they are firm at national level in each country equally for every sector's operators. Equal are also the air rental expenses while very different are the fuel costs. The low cost vectors use, in fact, modern aircrafts which consume much less fuel but above all for the fact the their load factor is superior respect the traditional companies. In conclusion, low fare companies for the marketing distribution costs carry out a great saving.

Tickets are sold, in fact, through Internet and not through GDS, the global distribution system, a computer system for booking and purchasing air tickets, which would result, too expensive.

The market's liberalization has allowed the birth of new operators who have been able to develop a new business model. These operators have known how to operate savings of cost which have made them competitive compared to the traditional vectors.

Ireland has been one of the first countries, which has begun this process, allowing that a low cost operator becomes leader of the market, leaving to market and consumer the possibility of making the most efficient choice.

5. CONCLUSIONS

After the liberalization of air transportation sector and at the beginning of the last decade, the defined low cost vectors have made their own mark on market in an explosive way, that is those air companies which offer flights with much less price than average, eliminating great part of secondary services directed to passengers. .

To show these new actors of air transportation sector, the expression no frills is used, which, literally translated, means without frills, that is to the absence of those services which are not strictly necessary. Considering the cost per passenger per offered kilometre, we can deduce that the low cost companies, leading the business, try to acquire a cost leadership per passenger lower than the other traditional companies that in many cases operate on the same courses, but often serving different airports.

The Irish company Ryanair, with this strategy has become a fundamental player in the world scenery even if the referring market is principally European. Millions of passengers in the last decade, a fleet with more and more technological aircrafts and new orders to cover more and more courses, make of the company led by O'Leary, the fifth company in terms of transported passengers in the world and the market leader of low cost sector in Europe.

Returning on business model of companies even called low fare and of full service, clear differences have been highlighted at commercial, technical and organizative level. Many times from the strictly low cost model, many companies use different positioning levers, and move towards hybrid models and solutions positioning in the middle between the two extremes: real low cost and full service.

To quote only some countries, in Italy, for example, in that last years there has been a progressive growth in terms of transported passengers above all for domestic market differently from what has happened in France where the national market is still in the hands of non low cost companies.

For those which are the future sceneries, Ryanair and other air companies will have to try to grow and sustain their competitive advantage which they have created in these year, with the goal to catch incomes as more as possible. If from one side value can be generated from new sources with more accessory services subject to a charge (internet, entertainment on board, more places for passenger of back side of aircraft who travel standing,) the imperative always is to try to cut costs on every side (only hand luggage to transport, aircrafts with less comfortable seats, elimination of the second pilot for brief courses,).

Only in this way it will be possible to pass, or nearly, from a low fare society to a no fare company.

REFERENCES

- [1] AMIT, R, ZOTT, C. 2001 Value creati on in e-business. *Strategic Management Journal* 22, 493–520.
- [2] CHESBROUGH, H. AND ROSENBLOOM, R.S. 2002 The role of business model in Capturing Value. *Innovation Industrial and corporate change*. 11 (3): 529-555, Available at [http:// www. hbs. edu. research/ facpubs/ workingpapers/ papers2/ 0001/ 01- 002. pdf](http://www.hbs.edu/research/facpubs/workingpapers/papers2/0001/01-002.pdf)
- [3] HAMEL, G., PRAHALAD, C. K. (1994) *Competing for the Future*. Harvard Business School Press. Boston, MA

- [4] HAMEL G. 2000 *Leading the Revolution* Harvard Business Scholl, Boston
- [5] KELLY, K. 1998. *New rules for the new economy: 10 radical strategies for a connected world.* Viking Penguin, New York
- [6] KOTLER P., BOWEN J., MAKENS J., *Marketing del turismo*, Mc Graw-Hill
- [7] MARIANI C., *Marketing low-cost*, FrancoAngeli
- [8] MORECROFT, J.D. ; AND STERNMAN, J.D.(editors) *Modelling for Learning Organizations*, pp. 3-28, Portland : Productivity Press.
- [9] NONAKA,I.(1994)A dynamic theory of organizational knowledge creation. *Organization Science* 5 (1): 14-37.
- [10] OSTERWALDER, A. AND PIGNEUR, Y. 2002 An e-Business Model Ontology for Modelling e-Business. *15th Bled E-Commerce Conference – Constructing the e- Economy. June 2002.* Available at http://ecommerce.ncsu.edu/business_models.html
- [11] OSTERWALDER, A. AND PIGNEUR, Y 2010, Business Model Generation <http://businessmodelgeneration.com/>
- [12] PASSIANTEG.,V. ELIA Knowledge leadership to drive digital innovation" in G.
- [13] PASSIANTE, V. ELIA, T. MASSARI (eds) "Digital Innovation" Ed. Imperial College Press 2003
- [14] PELICELLI G., *Strategie d'impresa*, EGEA
- [15] PUTNAM, D. 1997 *The Undeclared War: The Struggle for Control of the World's*
- [16] PUTNAM R. *Social Capital Measurement and Consequences*,2001
- [17] RAPPA, M. 2001 *Managing the digital enterprise - Business models on the Web.* http://ecommerce.ncsu.edu/business_models.html
- [18] ROMANO A., V. ELIA, G. PASSIANTE *Creating Business Innovation Leadership: an ongoing experiment*, Edizioni Scientifiche Italiane,2001
- [19] ROMANO A., V. ELIA, G. PASSIANTE *New sources of clustering in the Digital Economy"*, *Journal of Small Business & Enterprise Development*, vol. 8, n. 1, Spring
- [20] STERNMAN, J.D. 2000 *Business Dynamics: Systems Thinking and Modeling for a Complex World*, Boston: McGraw-Hill.
- [21] TAPSCOTT D., et al 2000 *Digital Capital* Nicholas Brealey Publishing, London
- [22] TIMMERS, P. 1998 *Business models for electronic markets.* *Electronic Market*8(2), 2–8.
- [23] WEILL, P., VITALE, M.R. 2001 *Place to space: Migrating to eBusiness Models*, *Harvard Business School Press*
- [24] YIN, R.K., 1994, *Case Study Research: Design and Methods*, Sage, Beverly Hills

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