DOCTORAL THESIS

REALITIES AND PERSPECTIVES IN MODERN AIRPORT MANAGEMENT

SUMMARY

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Motto

"We have to continually try to climb very high if we want to see very far"

Constantin Brancusi
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The doctoral thesis has as study object the realities and prospects of modern airport management. Currently there is a general concern for the implementation of performance management in all activity fields. The transport sector and especially the air transport is growing and modernizing which requires adaptation to new requirements of an efficient management leading to obtaining profits. For, Sibiu International Airport entered since 2006 into an extensive phase of modernization and the implementation of performance management I have chosen the theme of the thesis and case studies reflecting concerns for years that I had to achieve this goal and how things were done.

Therefore in the summary there are presented some preliminary synthesis elements.

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The air traffic knows in recent decades an increasingly rapid development, the airplane stopped for a long time to be a luxury and prohibitive mean of travel being mainly preferred for its fast and safe transport, and for good organization and carrying out traffic, for convenience and speed of flight. Modern society today can not be conceived without airports and air transport, whether passenger, freight or special.

Without an efficient and well organized transport system no country can develop economically and without economic development there can’t be a civilized population. Since ancient times countries which have made great empires have used the advantages of geography - landlocked, inland waterways. Egypt, China, Greece and Roman Empire increased by the development of river and sea routes, then states with access to the seas and oceans - the United Kingdom, Spain, Japan, followed by France, Germany and the U.S. - have become most economically developed.

Air traffic - the youngest and modern mode of transport - knows the rapid development rhythm in recent decades, with speeds that makes flying old range that were done in a few weeks long ago, to be completed nowadays in a few hours.

Therefore the existence of a developed transport sector inevitably leads to economic growth and thus to increase living standards and the degree of civilization of the population.

The contemporary world from all points of view and especially air transport is completely different in this era. There is no emphasis, but a warning of the most enlightened minds in current management, whereas these state of things come from the change - which as you know is the key feature of this century, and Peter Drucker1 - the best enlightened mind according to the assessment of the economists warn "tomorrow will be sure other day", "who does not change, should expect large negative surprises,” change or die out. " These three phrases could be found in airport
activity in terms of tehnicity, creativity and competition is leading the industry in the contemporary world.

Naturally, these changes should be reflected in management. Unfortunately their appearance ahead the management development in all areas and spheres of human activity, although Drucker quoted as saying "Management is the main way of economical growth" and Richard Farmer said that "the import of knowledge management is becoming more important than import of technology."

These were the reasons which led us to choose the thesis and the area in which we organized the scientific documentary and selective research for draft and thesis.

In this context we approach the issue of modern airport management, but also by the fact that Sibiu airport has undergone significant transformation in recent years that led to its acceptance as international airport.

**Sibiu International Airport** is an important air traffic in the intercarpathian area and are expected continuos traffic growth in the coming years. Through the upgrades which have been made and those which are going to be made in future, the airport will be upgraded in accordance with the usual recommendations given by the ICAO (International Civil Aviation Organization) and will provide domestic and international air transport with aircrafts having code letter "D" on a landing and taking off – runway, with the code number "4", with lighting, and automatic routing landing (ILS - Landing tools Sistems) Category II with expansion opportunities to Category III and higher.

From this perspective I have chosen the thesis to treat future realities of modern airport management.

Applying a contemporary performance management in civil aviation facilitates and guarantees fast and thorough development of healthy trade, cultural, industrial,and tourist relations, in a word, provides economic development of the community served by the airport and beyond.

In terms of specific organizational structure should mention that in an international airport operates several entities also private and state with partial or separate subordination to the airport, such as:

- **airlines - engine operations at airports.**
- **private commercial companies of aircraft fuel supply, Duty Free, Duty Pay, catering, media, cleaning, catering, and banking companies.**
- **air traffic services under the direct coordination of the Ministry of Transport (ROMATSA) - DSNA (Direction of air navigation services), which provides and coordinates air traffic in the airports;**
  - **Border Police - responsible for cross-border passenger traffic;**
  - **customs - managing cargo and luggage transport in airports;**
  - **terrorist control services - ensuring the safe conduct of flights;**
  - **Transport Police - which deals with security and public order in the airport.**
Airport management in addition to ensuring the safety and security conditions in airport traffic - passengers, cargo, aircraft – also involves ensuring the smooth conduct of the activity of all the other services mentioned above.

The personnel operating at the airport is a specially and lengthy trained staff, and can’t be find on the labor market, reason for which can not to be hired immediately, the staff requires careful preparation, high training costs and ongoing training and verification capabilities and skills.

**Continuing preparation** of the personnel consists in the fact that the technique used in the airport is only designed and built for serving airport utilities and also aircraft’s utilities:

- GPU’s (ground power units) for starting aircrafts on the ground, (the electrical power required to start engine), debit flights with totally different parameters of the electrical networks met in common electrical networks;
- airstartes - to start the engine of the aircraft on the ground;
- tractors and motorized stairs for embarking and disembarking passengers on board;
- Aerial lanes for loading baggage and cargo in the aircraft;
- other high instalations, electrical, mechanical, hydraulic, pneumatic used for loading of goods and catering at board of aircrafts, ambulance services, heavy parcels, transport containers, etc..
- specialized trucks to supply aircraft with liquid other than fuel;
- emptying aircraft;
- specialized aircraft tractors routing the planes on turnover positions;
- special buses for embarkation and disembarkation of passengers into and out of the aircraft;
- vehicles for visual directing visual of aircraft on the ground;
- ambulances which provide emergency services;
- Special equipment mounted on vehicles for aircraft de-icing and anti-icing at low temperature conditions to ensure safe aircraft takeoff;
- Tractors and special trailers for transporting luggage and cargo to and from aircraft;
- Special fire fighting machines equipped with fire extinguishing agents, foam, dust and gas;
- Vehicles equipped with extraction equipment and devices;
- Vehicles used for the maintenance of the Concrete surfaces (runway, landing – taking off platform, taxi ways);
- trucks equipped with brushes, snow plows, turbochargers, air-spread de-icing material instalations used for de-icing the concrete surfaces;
- Specialized vehicles to measure the drag coefficient of aircraft movement areas.
A **performant airport management** requires a harmonization of relations between policymakers across the whole range of activities and actions inside the airport, for smooth safe air traffic.

An airport can not exist and can not survive without wide and varied range of clients, be they regular airlines, state and private aircraft, charter or other types of aircraft, which generates airport revenue product as "aviation", and to product that generates revenue "non aviation" we mention: commercial rents - Duty Free, Duty Pay, retail, catering (restaurants, cafes), car rental, currency exchange, ticketing, ATM, parking, offices, platforms for fuel, control tower, technical areas etc.

In terms of competition between airports a heavy word to say envolves the development of the airport platform, its endowment with installations, vehicles and modern equipment, capable of meeting the requirements of air traffic safely and securely.

Addressing such issues proveded to be difficult due to the broad spectrum of activities, services, actions and relationships that take place at the same time while aligning national legislation with international law, under development and implementation of the latest technical developments in airport safety and security area in exploitation of the air traffic.

Of **airport security measures** we name but a few:
- perimetral fencing equipped with sensors of presence;
- cameras throughout the airport perimeter, with normal and infrared gallons;
- Control Primer radar control providing control to any entities being situated inside the airport surface, at ground level;
- Central monitoring security and rapid intervention teams.

For safety, the airport is equipped with equipments against birds, bright lighting, automatic update installations from landing aircraft, radio and other technical radio equipments.

**Air transport is currently the fastest form of transport of passengers and cargo**, with large radius of action, reason of why the interest showed by terrorist organizations is very high and has diversified forms of application, requiring airports to be equipped with the **latest equipment** for detection of substances and hazardous materials, such as:
- control devices and X-ray detection,
- Magnetic detection gates
- Portable detectors
- fingerprinting devices
- the iris scanning devices;
- fluids control and detection equipment;
- computer tomography for the detection of substances and dangerous materials hidden in the human body;
- equipment for transportation of hazardous materials in neutral areas;
Modern airport management involves a series of measures to prevent and combat crime and terrorism, stated precisely in the international expansion of safety regulations in civil aviation, national security program, each airport security program in part, procedures and working rules of each airport.

Because a modern management can be approached only through the perspective of the National Development Plan, the overall objective is to promote a transport system in Romania, facilitating quick and efficient circulation, under safe conditions according to the European standards, of people and goods, nationally and internationally.

One of the main features of management today is competitiveness, which provides sustainable market presence, in terms of interaction of many factors. For an airport to be competitive, this has to be safe, efficient, adaptable to new techniques and airport technologies, to provide quality services at minimum cost and all these can be achieved through a modern quality management. Competitiveness is a complex notion that can be defined as "characteristic of a firm to other similar firms to compete in a market." The competitiveness of a firm is influenced largely by the ability to understand and adapt as effectively as possible at the surrounding world.

Making of such a doctoral thesis was also impossible without the prior setting of milestones, targets, objectives to be achieved and to ensure consistency and logic of scientific research and thesis writing.

I considered that such a multidisciplinary thesis can not be structured without a hierarchy of problems into a logical and gradual way according to its importance and therefore, helped by the distinguished scientific coordinator univ.prof.dr.DHC Bogdan Ioan, I outlined 25 objectives (problems) extending from which the structure of the thesis took shape.

In developing the thesis we started from the following assumptions:
• The organization as an open system that allows its analysis based on external relations, reason of why we have bent over deep changes in the contemporary world with impact in the organization management, and therefore the airport organizations
• The key feature, dominating the XXI century is changing. This involves an activity aimed through a better management of technological resources and to an innovation activity, and the development of more sophisticated technological systems.
• Customer focus - the main component of change - is continuous and comprehensive identification and analysis of customer expectations of what they want, their translation into delivery of the products and services, in the conduct of interaction with customers, in order to develop and maintain good and economically advantageous relationships on long term.
• Globalization of business - the market economy mechanisms involves confrontation and tend to balance the demand with the supply on geographic areas increasingly
large, flows across the border with the aim of goods, services, technology, labor force, etc..

- **The internationalization of organizations** - international business is in a continuing growing which implies new requirements for those participating in cross-cultural activities.
- **Economics, organization and knowledge management** - in today's economy, learning and knowledges have become key success factors internationally,
- **Knowledge Capital** - the most powerful form of capital, intellectual capital - the support and promoter of these mutations.

*Changes in economic and social environmental coordinates* target the world economy as a whole, and in different ways, each national economy. For modern organization, the external environment to which they report their activity tends to space expansion.

The doctoral thesis is not only timely but also very complex, so for its achievement it was necessary to establish a set of goals that provide guidance and consistency to meet rigors of a scientific paper work.

**Objective I**

1. **Deep changes in the contemporary world with impact in the organization management, and therefore into the airport organizations**

   Airports have to create a strategy for modernization, development and extension through internationalization, should comply to the continuous change process induced by adaptation to the international economic environment. The change requires continuous adjustment of life of airlines to external conditions from operating environment, along with increased internal stability.

2. **Change - the dominant feature of the XXI century.**

   Change is driven by new technologies, new markets and consumer preferences, political and governmental pressures, social expectations and, according to specialists change is a continuous process, there is an endpoint and the much-needed stability periods ended. Currently the external environment complexity is so great that experts can not predict "future configurations." These changes are reflected in the airport business by introducing new technologies, new flight safety systems, new rules to ensure safe flying speed.

3. **Customer focus - the main component of change**

   Judicious knowledge of customers offers to an organization more efficient ways to use distribution channels, market opportunities, production factors and assets. Customer orientation is directly related to goods and / or services to businesses and the interaction between the bidder and customer. Inside the airport management there are two types of customers, namely:

   a. airport customers are the airlines which are attracted by the facilities that the airport offers, but also the degree of development of the area where the airport
operates, because every company is developing flight routes depending on the number of passengers that it can attract

b. business customers are residents of surrounding areas of airports that are willing to fly with some regularity.

Customer satisfaction indicates to what extent overlap the promises and achievements of the bidder with the customer expectations. We say that an organization which has only satisfied customers is a customer oriented company.

4. **Globalization of business**

Globalization is the term used to describe changes in society and the world economy, changes resulting from increased international trade and particularly from cultural exchanges. In the economic context, reference is common, almost exclusively, the effects of trade and, in particular, trade liberalization or free trade. Airports have always been strengths in rapid exchanging of goods and cultural exchanges. Open gates to all over the world have made it possible for trade in goods to be made quickly and in very good conditions.

5. **The internationalization of organizations**

The internationalization of firms is the most complex, broader and more urgent need to occur in management of organizations, in order to adapt to the globalization of business and to prevent risks that accompany this phenomenon, but especially to qualify and implement the value that the benefits can bring. Airports are also of this point of view one step ahead of other organizations through the specific activities they carried out.

6. **Economics, organization and knowledge management**

XXI century requires airport management professionals to go beyond leadership on creating novelty, knowledge. In our time, knowledge management is the art of creating conditions to allow a continuous flow of creativity. Airport activity is profoundly affected by the development of informatics, by the rapidly developing knowledges in the field. It is therefore necessary for the airport management to adapt quickly to market requirements, to the development of marketing, to improve its staff so as to cope with rapid changes facing an airport day after day.

7. **Knowledge Capital - the most powerful form of capital, intellectual capital - the support and promoter of these mutations**

Information and knowledge are considered in the beginning of XXI century, new major resource of any organization, resources to be managed and used efficiently, information management and increasingly more knowledge management are considered major functions of management. In the new economic context, knowledge management is the key resource to become competitive. Currently, airport activity can not be conceived without the knowledge capital and intellectual capital default. The pace of development and introduction of new technology is robust in this area so that any delay in their application leads to unimaginable economic losses. Therefore investment in intellectual capital is a priority, human resource which an airport should
have must be highly qualified and able to adapt quickly to new technological requirements.

Objective II

8. The current global financial and economic crisis and its impact on management

The choice of this objective, we considered it to be mandatory for any scientific paper work and any scientific approach which is done in the crisis context and especially for the survival after the crisis. It is a fundamental error to bypass this objective. The current financial and economic crisis is shaking all existing conceptual and operational foundations, all becoming inoperable, non-operational, unprofitable and dangerous, full of risks, if maintained in the existing form. In matters crisis in airport activity make three comments: 1. crisis has spurred creativity and innovation, 2. intensified competition, 3. in the first phase lowered the incomes. As a result of the impact which the crisis has in the contemporary world and especially to overcome the crisis, it was natural that the whole doctoral thesis to be designed and built in terms of exit solutions and especially to survive the crisis. Objective evidence of this were given in Chapter V, on a printing surface of ........... pages.

9. Place and role of air transport in the mechanism of the country's economic and social development

At present we can not speak for the country's economic growth without air transport. Transports and especially air transport is a main branch of material production and service development especially in tourism. With their help move the products from place of production to the consumer, both domestic and world markets.

10. Realities and requirements in the management of the airport organizations in terms of changes and mutations shown

Airport organizations more than any other organizations are subject to change in the current context, due to the global financial crisis and the speed of technologies that operate in such an organization. Therefore, it requires an increase in structural and functional flexibility of all services serving the airport to better adapt to global environmental requirements. It is necessary that in these conditions the organizational objectives to be quickly designed, to be clearly identified the key skills that lead to activities that generate benefits. A number of changes have also been identified successfully by respondents in the selective conducted research.

Objective III

11. Management of the airport as a subsystem of the overall management of the organization

Due to very complex work in an airport, management increased from a manager with several subordinates, to a team of several managers and several subordinates. Proper functioning of the airport activities are based on good coordination and collaboration between different services, but also a rigorous control of how the entire activity works.
12. Human resources - the main strategic resource of the organization, and therefore of the airport organizations

Successful conduct of activities in a company depends largely on the degree to which it is understood, motivated and coordinated the human factor. This concern lies in the fact that human resource is one of the ways and major sources of economic efficiency and not at least the company profitability. The airport organizations’ concern for highly skilled human resource is understandable given the fact that specific activities should be carried out at high levels of requirement in the field, with the most modern technology and, human error can not be accepted.

13. Investment in human resources the most important strategic investment of the organization, but also the riskiest

Within the airport organization, great emphasis is placed on training, qualification and upgrading human resources, taking into account accelerated pace of development and modernization of technologies used in aviation. It places particular emphasis on the whole personal qualification, its specialization through training courses for training, regular training and systematic repetition of the procedures that underpin specific activities of airport activity. All these costs are high, so it is necessary to find ways to retain and motivate staff.

14. Airport activity - the complexity, difficulty and specific risks

Activity taking place at an airport is very complex, due to many activities which are made to ensure flight safety, these assume control, supervision and inspection of all aviation activities. The national air transport includes the following components:

- operation of aircraft,
- airport operation,
- the business of servicing of aircraft,
- air navigation services,
- maintenance of aircraft,
- licensing of aeronautical personnel,
- initial and periodic training of aeronautical personnel;
- medical expertise and certification of aeronautical personnel.

15. Airport organization staff - a staff of bill and with specific role, distinct and difficult to form and maintain

For all activities taking place at an airport is needed qualified personnel undergo to continuous training and improvement. These improvements must be made because of the fast pace of development of techniques in all activities taking place at an airport, from flight safety, passengers, cargo and up to the routing of aircraft and baggage handling or goods. These improvements and training are made in accordance with applicable laws and are made by AACR (Romanian Civil Aeronautical Authority) or those authorized by it to do preparatory courses. Necessary training and staff development costs are usually quite large, so the investment in an airport serving
staff is substantial, which is why it is necessary to find ways to retain and maintain on long periods of those employees who demonstrate a good preparation and predisposition towards continuous improvement.

16. **Organizational structures of the airport organization - their specificity and their impact on management**

The complexity and specificity of work in an airport requires a type of management and a profile of the manager based on specific knowledges of the area as well as ongoing training in the field, in order to keep pace with the continued development of techniques and technologies. On the basis of talent and training, managers must understand the special nature of knowledge management, to have vision, approaches, methods and techniques to make effective management and development of multiple and various processes that they have to face in their daily work.

17. **Management structures specific to the airport organization**

The structure of an organization depends on the function it has. Organizations evolve from small units to some increasingly complex, with a large number of activities. In this case there is a burden need of sharing the tasks between members of the organization. The need to coordinate various activities give rise to a hierarchy that is designed in such a way that enables managers to control the organizations, to ensure meeting the needs of employees and to make better decisions. Airport, in this case Sibiu International Airport is managed by a Board of Directors. The General Director reports directly to the Board and direct to the General Directorate of Civil Aviation for liaison with Ministry of Transport and has under subordination all the staff of Sibiu International Airport RA. The work is divided in several directions: operational, technical, economic and trade each with a director and several subordinate services and compartments.

18. **Specific structures of bodies that airport organizations collaborate with**

Airport par excellence is an integrated organization in a system of institutional relations, of a complexity and sophistication we say very specifically. The existence of this so important network, in constant motion and transformation, is reflecting in the highest grade- change, fundamental change effects of the contemporary world and thus become essential parameters of airport management, but also mutually theirs. We considered that such an objective must be part of goals pursued with vigor throughout the thesis. Of the many entities that make up this network, which depends on the airport performance management we mention: air traffic services, navigation services, air navigation services protection, navigation and control services, border and customs services, security services and anti-terrorism, etc.. We believe that it results clearly the need to choose and respect this objective. In the context of terrorism, the multiplication of aviation accidents, of fierce competition etc., aspects as shown, dominant of the contemporary world, it was imperative that in any scientific approach.
to take account of this objective. It is natural too, as this objective also, to have been considered throughout the thesis.

19. Airport organizations under the impact of multiculturalism

Globalization is a relatively recent phenomenon, has seen spectacular growth since 1980, with the globalization of financial markets. In terms of airport activity, we can say that globalization began with the first international commercial flight. We can say that the airport is hub of globalization, since it is the most important bridge that serves the majority of international economic relations, and ensures at the same time and transfer of passengers and cargo over long distances in very short time.

20. Other specific elements of the functions and neofunctions of the airport organizations

The basic functions of management are: the provision, organization, coordination, training, monitoring and evaluation. All this is found in airport activity, by the way in which they are met, depends the safety of all airport activities. The neofunctions of the management are those that improve the organization's ability to be economically independent, self-financing to the establishment of appropriate knowledge by establishing areas of knowledge available to ensure the necessary knowledge, not least through the office building and exploitation of knowledge accumulated. All traditional functions of the organization are found in the airport activity such as: the development, commercial, marketing, financial accounting and personnel, but must increasingly focus more on activities the neofunction insurance, asset recovery and transfer in competitive advantage of the knowledges in the field. In this new position should be emphasized that an organization may exist, especially in conditions of economic – financial crisis only if it can be competitive and realize benefits to ensure its sustainability.

21. Sibiu International Airport – into an explosive growth in the period 2006 - 2011 - based on scientific research to substantiate specific case of theoretical and methodological concepts of the thesis.

As shown in motivating the choice of thesis topic, Sibiu Airport underwent during that period major structural, functional and organizational changes that led to his recognition as International Airport. This process is particular due to the fact that throughout the period of reorganization and modernization the airport was operational, managing to provide air traffic services which allowed the maintenance of traditional racing also after modernization attracting new flights through several airlines. Currently at Sibiu International Airport can land or take off aircrafts that can exceed 180 seats each, at every five minutes.

22. A SWOT analysis – proper to the applied airport management is arising from the case study.

Following research carried out we could name a few of the strengths and weaknesses that have emerged, namely: strengths - "Focusing on getting the performance" - the highest percentage, 33%, have the answers "heavily", seen as a
strength of airport management; "The development of robust strategies" - 32% of respondents consider that the development of robust strategies is in a great measure a strength of airport management; "Design and implementation of management procedures" - 39% of respondents consider that the design and implementation of management procedures is great and very much a strength of airport management in our country. Weaknesses: *Failure to adapt managerial know-how valuable in other countries* - 57% of respondents considered it one of the weaknesses of modern airport management at Romanian airports; "Insufficient knowledge and taking into consideration of developments on the domestic and / or international market" - 58% of the respondents believe failure in the knowledge and consideration of developments on the domestic and / or international market, as being a weakness of Romanian airport management; "Design and implementation of inadequate management procedures" - 65% of respondents consider the design and implementation of management procedures being inadequate as a weakness of Romanian airport management.

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The doctoral thesis as you can see is not only of *topical importance and originality*, but through the issues raised by specificity of the problems resulting from the airport activity, for their resolution were needed multi and interdisciplinary knowledges, consultation of a rich literature specialized in management, still having low enough data on the strict management of the activity taking place in an airport, but just the work submitted to solve problems arising during the preparation of the thesis was the one who gave me many satisfactions.

The thesis as a whole provides a platform for scientific research and for the airport performance research.

Doctoral thesis was prepared under the competent leadership of distinguished scientific *univ. prof.dr.DHC Ioan Bogdan*, whom I address with great esteem and gratitude warmest thanks for his guidance, encouragement and patience with which he guided me during the preparation of the thesis.

*Air transport* is a strategic activity strongly correlated with the economic system and presenting an integration both at sectorial, territorial and international level, having potential multiplier effects on income, employment and consumption. Stimulation of development of other economic sectors by air transport is reflected not only by creating gross domestic product and employment in other areas that are closely related to it (such as tourism).

On the other hand, congestion of traffic, often caused by tourist flows, is restricting the transport capacity.
In this context, inside the thesis I aimed not only the approach in a complex manner of the concepts used in air transport, analysis and interpretation of statistical information, evaluating strategies in the development of the risk management area, but also identification of practical solutions to help mitigate risks which aviation is facing today.

Issues discussed cover an area not much addressed by local literature specialist, being based on research carried out both nationally and internationally. Thus, the existence of important works developed by specialists of the field in Romania, contributed strongly to achieve the conceptual framework and the subsequent analysis performed to complete the research.

The thesis focuses on presenting in a systematic manner the types of managers and management, the definition of specific tasks, the analysis of features and their effects, as well as highlighting trends regarding the management inside an organization with airport specific.

Air transport, in particular, are areas heavily exposed to risk. Currently the risk is a phenomenon that occurs in all areas of life- economic and social, and therefore knowledge and understanding its mechanisms, its determinants, its forms of expression and particularly, its efficient management is one of the major concerns of the modern management. Whether it’s air transport or other economic and social components, as long as the activity is more complex and varied, as long the risk and its consequences are greater, reson of which emphasizes efforts to reduce or prevent him. Along with increasing of risk and the diversification of its forms, it can be registered an evolution in its management, initially, it was implemented in companies that produced goods, gradually being taken over and adapted in the service sector and hence in the transport sphere. The typology range of risks in the transport area and in particular of those from the air transport, determining some of natural causes, impossible to predict, is reflected in difficulties met in the process of developing specific management plans.

In the context of major changes in Romanian society, contemporary market forces determine a certain behavior, which has as its dominant the competition for resources, customers and suppliers, competition in which performance has a critical role.

In order to ensure high performance in aviation sector it will be necessary to adapt it to changes taking place in the operating environment.

Performance, as a management dimension of the management, is a competitive state, reached by a level of efficiency and productivity which ensures its sustainable market presence, under multiform and complex interaction of many factors. In management and particularly in performance which must always accompany him, reaching these objectives is presented as a necessity and a definitional component.

The concept of economic efficiency, in terms of economic performance, is linking the allocated resources to conduct an action and the results obtained from it,
and directs the allocation of resources to those areas of work which ensure maximum efficient use of them in terms of rational development of the market economy.

Air transport is an important component of the global economy, stimulating in the same time industrial and tourism development. With a relatively short history compared to other modes of travel, they now occupy a privileged place among the preferences of businessmen, tourists and travelers in general, especially for large and medium-distance travel. In recent decades, changes in aviation regulatory regime, economic and political events occurring globally and enhancing passenger experience led to evident changes in redirecting international transport flows, and their default option for a particular mode of travel.

Thus, one can say, that in recent years, transport has evolved nationally, with major positive effects on local structures.

All types of travel are used by travelers, which primarily want the reducing of the time spent in traveling and increasing of the time spent at the final destination, whether for business or vacation.

Therefore the transports interfere with the component of the touristical benefit significantly influencing the passengers’ degree of satisfaction.

The case study focuses on presenting the approaches taken to development and modernization of Sibiu Airport (infrastructure, terminal, material and technical), and the evolution of air traffic.

At the same time, there are analyzed and evaluated a number of strategies and programs to implement environmental management plan and also the monitoring plan, the final part showing the processing of the results of field research, which targeted risks and quality of services offered and their management.

It can be concluded that all those mentioned measures are designed to increase the efficiency of the administrative act, to ensure a higher degree of transparency of an institution activity and increase the quality of services offered to passengers, airlines, companies.

Given the above exposed, the following recommendations are required: 
1. In order to improve the efficiency of civil aviation in Romania should be increased the performance of Regional Air Network.
2. The growth performances concept of Regional Air Network contains the essence and core strategic directions for the organization and stewardship activities, designed to raise the regional network performance. The concept of the network growth performance is based on: the consolidation and coordination of private and state business activating in aeronautical domain in Romania, a cooperative operation between central government representatives and representatives of regional airports, using the advantages of favorable geographical position of each region.
3. The development strategy of the Regional Air Network consists in increasing its performances. From strategic directions for the development of the Regional Air
Network there have been proposed: the ensuring of flights safety and aviation security, aircraft fleet modernization, development of air transport market.

4. Regarding performance evaluation methodology of passengers and goods transportation within regional network, one can define the following steps: the determination of the Regional Air Network opportunities, the determination of the outcome of work done indicator, the determination of transport efficiency indicator conducted in this network.

5. The development of cooperation, collaboration and partnership with international aviation community, for the purposes of applying the world production experience and management, and of attracting modern equipment and technology, will contribute to the development of civil aviation industry.

The measures, their results and the evolution of the activities in this period that I have reported to, have already been presented in the thesis therefore will not be repeated here. But must be reiterated that the goal was to substantiate a model for relations between the identification and risk assessment elements, in the aviation industry by highlighting the implications of the use of this type of transport, but also the relationships and effects on the prices used.

Currently, alignment to international standards in terms of crisis and risk of price increases, could lead to significant changes, with direct implications on the use of this type of transport.

Conclusions include realistic ideas that could be applied across organizations active in air transportation.

Having as starting points the above and basing on the information processing of materials, specialized domestic and international regulations, but also on the analyzes of the existing practical experiences, the doctoral thesis was thus made to allow the assertion of the author's own views in terms of theoretical aspects, but also in directing the practical work.

**Identification of foreseeable changes in company management and their impact on airport**

Given the importance and necessity of the changes that organizations have to cross in the current context, especially that of the global financial crisis we have taken this objective and we are mainly referring to those changes that can be summarized as the overall reconfiguration of airports by increasing structural and functional flexibility of activities to better adapt to global environmental requirements.

Airports must permanently be reconfigured, realigned and they must change their focus area. Global competition in a world of oversupply, with almost perfect markets is killing companies and mediocre product offerings. As a result of increasing pressure from customers and all categories of stakeholders, increasingly more airlines are swallowed by alliances. In such almost perfect markets,
inefficiencies can not survive and therefore they disappear. Airlines and also incompetent airports die alone.

In these circumstances, flexible organizational structures, rethinking organizational objectives, focusing on key skills, transferring activities to the customer to increase their satisfaction - decay - all these issues, successfully identified by respondents in the selective scientific research carried out predictable but necessary changes at Romanian airports.

I have treated this objective in almost all parts and sections of the paper, trying to extract every major mutations that airports and especially the airport management will suffer, and I have synthesized them into the partial conclusions chapters and individual contributions.

In fact, during the thesis were presented the implications of which increasing structural and functional flexibility of airports by disintegration activities has on this managerial subsystem, considered by us and by the majority of interviewed respondents as key to ensuring the success of organizations.

**Customer focus - essential component of marketing management of airport**

It is harder to obtain competitive advantages looming for airlines and airports of the XXI century. Competitive concepts of yesteryear, who have once been successfully, as- product differentiation, technological supremacy or cost reduction are no longer sufficient, into the current market conditions, to ensure on long term a profitable position, economically advantageous.

A case is considered to be the increase of competitive intensity. This led to the fact that the offered products become more similar and product innovations mimic ever faster, with more low cost.

More and more airports are in a position to offer products for specific target groups at the required quality and at competitive prices. Thus, taking into account their objective qualities they became interchangeable for the customer.

Because of this it was necessary to seek new sources of differentiation, that is appreciated by customers and allow the airport to maintain a more difficult advantage to match by the competition, for a longer period of time.

Both literature and practice considers customer satisfaction a central indicator in the assessment of an airport on providing quality services.

Customer satisfaction indicate to what extent overlap the promises and achievements of the bidder with the customer expectations. We can say that the airport which has only satisfied customer is a customer-oriented airport. For these reasons, and not only, we believe that it is absolutely necessary to consider customer orientation and its role in the management of the airport marketing as a major research objective, both documentary and applicative of the thesis.
We treated this objective in the first part of the thesis. We gave great importance to this objective, it occupying a significant place in the overall economy of the thesis.

We believe that managers should be aware of the importance, changes that foresee, the advantages that customer orientation brings in economic-financial world crisis. Hence the importance of knowledge of what customer satisfaction means, customer orientation and quality-oriented overview.

**Globalization and internationalization of firms generate business risks that impact the management of airport**

Realising objectives and projects of an airport involves identification and multiple risk taking, such as: environmental or internal changes, design of unrealistic strategies, errors and omissions in design and execution, etc..

Considering that the change emphasizes renewal, but also uncertainty and risk, we say that in times of crisis, we must introduce some measures of *change on the benefit of the customers*. These measures must be in terms of airports changes, centered on the *values of knowledge, on the mentality change of the managers and employees and also on the mode of communication, of firms' action*, so as to avoid or compress the risk of losing customers and implicit the position on the market.

Throughout the paper, in several chapters and subchapters, and into the selective scientific research I paid attention to the concept of risk, considering that all actions taken at an airport include a risk component, especially in business globalization and internationalization of firms.

Management subsystems must be subordinated to learning - as Jack Welch of General Electric said - "an organization's ability to learn and to translate quickly into action what has been learned is the supreme competitive advantage in business ".

Construction of the thesis started from the premise, which I supported it throughout the thesis, that the airport marketing management is a subsystem of the overall management. Thus apply with the necessary features, all laws governing the specific components of general management.

Under the impact of change, these components undergo specific transformations, mutations, which we tried and we believe that we succeeded in a large extent, to identify and synthesize them with the bibliographical parts we have presented and validated with the use of selective scientific research results.

In order to find some solutions to overcome the global financial crisis and highlight through which measures and solutions were overcome other crises, the content of the chapter was outlined by this objective. The methodology is an essential specific component of the general management system with significant implications in the management of airport marketing. Given the importance of customer orientation,
we discussed at length issues related to customer relationship management as a method of modern marketing management.

Last successful approach of CRM (Customer Relationship Management) is an effective demonstration of the new ways of relating to the client. Its aim is to recreate the situation met in small neighborhood shops a few decades ago, in which the seller knew his customers by both names, he knew their preferences and found time to talk with them, not necessarily about business. CRM is the same individualized approach of customer relations, which, however, because modern information technologies will be able to establish "friendly" relations with an incomparably greater number of customers. CRM is a good example for eBusiness, not a new invention, but as an efficient use of new information technologies in business.

The main lines of business globalization impact

Business globalization creates both opportunities and threats to airports. But it is noted the fact that at the Romanian airports, awareness of those opportunities and potential threats provided by the global environment is much too limited.

Romanian airport managers must understand that currently there are no economies closed, homogeneous and protected. The reality of everyday life is that we address airport customers with different values and value systems, which live in closed societies than others but at least Europe has the advantage of diversity that can generate creativity, innovation and progress.

Historical reality shows that as its development, airport organization tends to exceed local, national and regional limits and to expand the activity into the global economic space. On the internationalization base is the expansionism of the market forces, their tendency to invade the unmarketized environment and include it in an economic system based on market mechanism.

Regarding this objective, the issues presented were scientifically argued in national and international literature listed in the bibliographic material. Also the addressed issues were used in published papers both as sole author and coauthor.

The main personal contribution of this study objective is to present, analyze, through bibliographic study but also their expression of views on a number of issues about how to deal with modern airport management in the context of globalization, the main changes that it brings, inventory obstacles to globalization, capturing through the scientific research selectively carried out the attitude of managers and professionals in the field, experts and customers on the phenomenon of globalization of business.

Impact that the economy, organization and knowledge management have on airport management
Knowledge requires massive and continue investments throughout life, in education and training. In the new era that is not enough for employees working in knowledge organization and knowledge organization to acquire and hold a significant stock of knowledge. To do a comprehensive analysis of airport management we have found it necessary to allocate an objective to the concept of economics, organization and knowledge management.

To be truly useful, to help increase airport organization performance, it is important that employees can share and disseminate knowledge throughout the organization and can capitalize properly integrating it harmoniously into offered products / services. In this context, information system, based on new information technology, has a vital role. Knowledge-based economy presents a number of features that clearly differentiate the industrial economy.

The concept of knowledge-based organization has its origins in the years 1984-1988 and recorded since then, successive stages of crystallization. Thus, Huber (1984) has made explicit the nature and design issues related to 'post-industrial' organizations, appreciating the need for a new type of its own organizational model that succeeds the industrial society.

Knowledge management refers to the ability to identify, collect, store and access both extrinsic intellectual capital and intrinsic intellectual capital and create a considerable amount of knowledge that can be shared with others and can be applied both in organization and society.

Organisations must not only develop and expand knowledge of the employees, they also must use mechanisms and procedures to transform individual knowledge in assets. Continuous use of knowledge does not diminish their value, as other inputs. Conversely, how often we use knowledge, the more we develop and increase their value.

Knowledge is acquired and developed gradually, as employees gain experience in the organization, but can be lost very easily, by employees leaving the organization. It is therefore extremely important for modern airports to develop logic and methodic mechanism for knowledge management, to systematize knowledge and information assets and to combine existing knowledge in an optimal way to increase performance of airport activities. Also, companies must find ways to develop and disseminate existing knowledge.

Modern economic environment is characterized by volatility, high income brought by employees and rapid changes in international political domain or competitional domain.

As a result, modern airports cannot compete on the market without skilled managers and employees. Therefore, the methods they use to manage and use knowledge, processes and technologies specific to their activity, including computer technology, are extremely important. From this perspective, we only have to point out
that it always feels the need to improve management of marketing activities, based on knowledge, combined with their effective management.

XXI century requires professionals in airport management to go beyond leadership on creating novelty, knowledge. In our time, knowledge management is the art of creating conditions to allow a continuous flow of creativity.

In the recent years a lot have been written about the economy, organization and knowledge management, but the manner in which we considered to address and synthesize aspects of bibliographic material collected for the study to valid them through the selective scientific research, represents the main contribution in achieving this objective inside the thesis.

Airlines operating in our country this year have announced increases in passenger numbers, yet their economic situation is not the best. This is explained by the fact that there were some mistakes made by management, namely: aircraft acquired though predictable repercussions of the crisis generated by, also choosing the destinations was not made after a realistic market study.

The onset of the crisis on the local aviation market determined also a massive increase competition between airlines, which translated into significantly decreases the rates.

The number of passengers increased for most companies, even in full crisis. However, these increases are much less relevant to improve the financial situation of air operators, since these rates are much lower than before and that they are correlated with substantial decreases in rates.

The current situation requires effective control of costs and giving up at loss destinations. It is imperative to make thorough studies of the market when launching a new airline, to take account of economic and tourism potential of the areas to which they fly, whether passenger flow is constant throughout the year, in return regime, or if there are only destinations that take a particular season of the year. A number of airlines have opened lines of flight which closed after a few months. This occurred also because they practiced dumping prices when expanded on the local market.

Therefore, it requires a series of measures to reduce costs, both the costs of administration in stopovers with major impact, and also the lower of personnel costs.

In the airport management, both at airports and airlines is necessary to take into account a number of factors particularly important in profits, namely: flight safety, quality customer service and not at least the practiced tariffs.

The object the thesis, as stated in the first part of the introduction, is part of the general problems of modernization in line with the requirements of airport management globalization of the economy, organization and knowledge management. Given the specificity of the thesis would have been a hazard if we had not made an effort to appropriate documentation to know as much as possible the views of specialists. It would also be a space not enough argued if we have been excluded the
bibliographic markers, which are the fruit of our work both during the preparation of the thesis documentation, and also before.

Like any start our doctoral thesis is perfectible, being the result of human work. We appreciate however that it may be a real basis in fact and a valuable one to new beginnings, for knowledge. To be wrong is human, but hopefully we have the goodwill of readers, taking into consideration our honest intention to contribute to the progress of airport management in our country.

I believe that practical experience that I acquired in a management function in the management of the Sibiu International Airport, the documentary visits to airports located on every continent and numerous discussions with leading experts from Germany, England, France, Netherlands, USA, Canada, Australia, China, Japan, have been very helpful to me, in developing the thesis
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Key words

Change
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Clients
Orientation towards clients
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Internationalization
World crisis
Performance
Efficiency
Efficacy