

IMPLEMENTATION OF PESTE ANALYSIS IN THE AVIATION INDUSTRY

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The article deals with analyzing the impact of external environment on airlines. Based on the theoretical knowledge and treatment options of company environment analysis, it suggests a realization of PESTE analysis, focusing on the selection of the relevant factors of the external environment for companies involved in aviation industry and transportation.

Keywords: Airline, Air Transport, External Environment, Environmental Factors, PESTE Analysis

1 INTRODUCTION

Airports, air carriers and other businesses whose activities are related to the provision of air transportation, must constantly seek new ways of its application in the transport market. They often deal with the questions concerning the choice of market, new product development, improving the quality of services already offered and related investments. Dynamic changes in the external environment of airlines require constant updating and innovation of specific knowledge on the impact of their action and consequences, which might be caused by their action. It follows that research aimed at assessing the external business environment is a continuous process and it is expected from management employees of airlines that they can accurately, quickly and efficiently evaluate the possibility of undertaking with respect to external influences.

2 AIRLINE

Based on the basic definitions, airline can be characterized as an entity operating in the field of air transport provision and related activities (Fig.1). A transformation process takes place in the airlines, where the input sources change into output. The outcome in this case understands service, thus providing air transportation. In the case of manufacturing airlines it is for example such product as aircraft, without which the air traffic service could not be provided. Business in the field of civil aviation cannot be understood merely as providing air transportation, it is necessary to take into account other activities, without which the transport could not be implemented.



Fig. 1 Business in the Air Transport

The activities, understood as the aviation business, may include:

- the provision of air transport;
- the operation of civil airports;
- the provision of air traffic services;
- the implementation of aeronautical information services;
- the implementation of aviation meteorological services;
- the implementation of aeronautical telecommunication services and communication services for aeronautical meteorological service;
- the flight school activity;
- the aerial works;
- the development, production, implementation of modifications and testing of aeronautical products;
- the repair and maintenance of aeronautical products;
- the provision of services for clearance of passengers and cargo;
- the ground handling of aircrafts;
- the maintenance of movement areas of airports, etc.

3 BUSINESS ENVIRONMENTS AND ANALYSIS

Each airline is essentially an open system embedded into the overall environment with which certain forms of interaction are established. These are manifested in the form of societal changes and are now seen mainly on the basis of progressing globalization, integration processes, decentralization and development of technology. The development of air transport results in increased range and speed of the aircrafts, which makes it easier to overcome national borders. For this reason, air transport has mostly international character, which must be respected when considering the position of particular airlines in the external environment. In the literature, there are many theoretical approaches definition of business environment to the classification and specification of its components. Based on these theories, the business environment can be generally classified and be monitored in the three basic levels, namely:

- World Business Environment;
- Macroenvironment;
- Microenvironment.

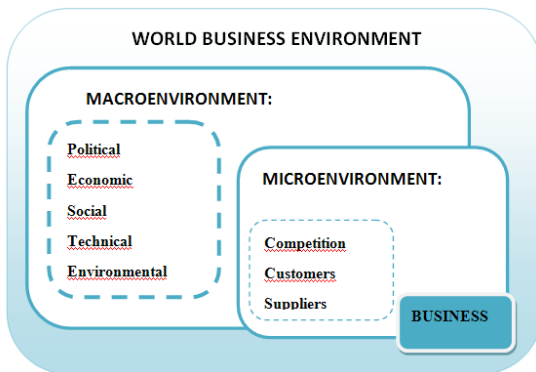


Fig. 2 Business Environment

Environment of the airlines is very dynamic in recent years, therefore it is necessary to systematically monitor and analyze this environment. To obtain a correct concept of the position of airline serves in a particular environment we use a situational analysis, which describes the parameters of the external environment, confronts each other, evaluates and provides decision criteria for selecting a strategy.

Situational analysis consists of three main sections, namely:

- information section, whose primary objective is to collect information and an evaluation of the external and internal factors, and competitive profile matrix;
- comparative section is based on the values obtained by analyzing the external and internal factors, and generates possible strategies through methods such as SWOT, SPACE, BCG, etc.;
- decision section objectively evaluates possible strategies options.

In particular parts of the situational analysis, different analytical and evaluation methods that are essential to its comprehensive nature are used. These analytical methods can also include the PEST analysis, which deals with a detailed examination of business macro-environmental factors.

4 PESTE ANALYSIS

Evaluation of macro-environment is based on so called PESTE analysis, i.e. analysis of external environment factors.

Denomination PESTE is an acronym consisting of the first letters indicating the individual factors of the wider environment.

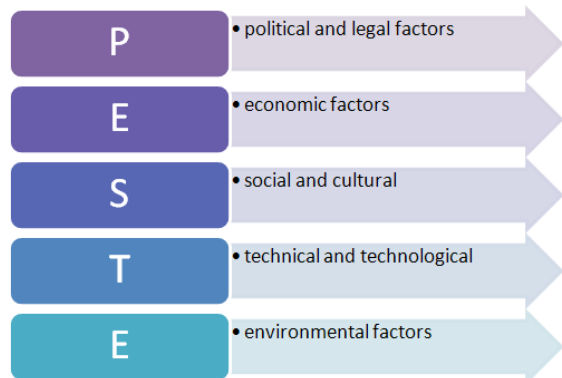


Fig. 3 External Environment Factors

This analysis is method used mainly in strategic management, marketing and the need for its implementation arises mainly in planning and decision-making on key issues that are solved within the enterprise. PESTE is a useful tool for understanding of market, its growth or decline, as well as for determining the position of the company, its potential and direction. The examination of the external business environment can be considered to be a process of systematic and objective collection, analysis of data and transfer of the results of its basic characteristics, as well as the impact analysis of factors associated with these results to forecast the development of the basic characteristics of business environment and their impact. PESTE analysis is a method that allows:

- perfectly know the external business environment;
- analyze its particular elements;
- monitor development trends of environment;
- use efficiencies;
- eliminate negative impacts;
- use the acquired knowledge for further analysis, evaluation strategies.

4.1 The procedure of the PESTE analysis implementation

Knowing the process facilitates and accelerates the process of analyzing and evaluating the external business environment of airlines. It is possible to carry out analysis of the external business environment by a process consisting of three basic phases, namely:

- preparation;
- implementation;
- evaluation.

Each of these phases consists of the next steps that need to be taken so that the overall process would lead from the needs of analysis of the external business environment to the output, which is in this case the evaluation environment (see Fig. 4).

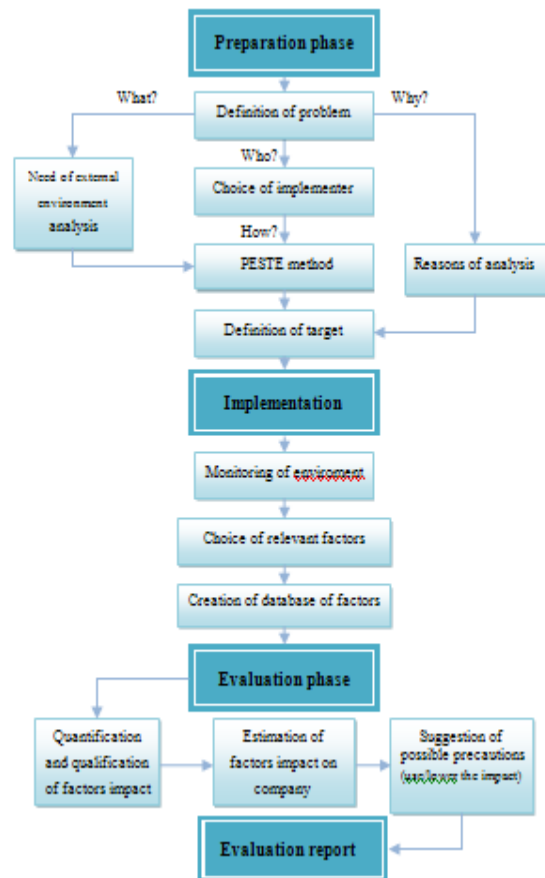


Fig. 4 The Procedure of the PESTE Analysis Implementation in the Aviation Industry

The function of the preparatory phase is a detailed analysis of the problem and determination of the target. The problem definition gives rise to the following questions for which the answers are needed:

- What does enterprise need to review?
- Why does the particular area need to be reviewed?
- Who will implement research?
- What method will be used for implementation?

Before analyzing of specific and at first sight complicated external environment, the company should firstly effectively target the analysis and in this case the aim should be to find the answers to the following questions:

- What are the environmental factors which have the biggest impact on the airline?
- What are the development trends of the five basic areas of the reviewed environment?
- Which from the observed factors cause the change?
- What impact can be expected due to influence of these changes on the existence and operation of an airline?
- What will be the impact of expected changes on business strategy choices?

Once the problem is fully understood and the target is determined it can be proceeded to implementation phase. A prerequisite for evaluation of external factors affecting the company is monitoring of the external environment, analysis of individual factors and the resulting assessment of potential impacts on a particular subject. It is necessary to understand the characteristics of the external environment as a reasonable estimate of the impact strength of his most important influences. It means to give priority to the development of targeted monitoring of those areas that really affect the business, before gathering any potentially interesting information. In monitoring phase, responsible employees observe hundreds of economic parameters, number of technological and cultural factors and other influences. Considering a large variety of variables, the staff should choose relevant and most important variables in the implementation phase. Data on these variables should be collected from various sources and should be used in the creation of development trends and at the same time pointing out that the environment is crucial. It is this step that can be seen as a key one and as a prerequisite for proper evaluation of the external environment of an airline. The last step of the implementation phase is to create a database of factors whose result would be a comprehensive list of particular operating factors.

The last phase of the analysis procedure of the external environment is the evaluation phase. In this phase, it is worked with the output of the implementation phase, which is a database of environmental factors. The individual items of recorded operating factors are complemented by the relevant verbal evaluation or by assignment of score to the impact. The score is especially important when multiple markets are analyzed, making their comparison clearer.

In the next step the impacts, which will be evaluated and monitored, are estimated. Another important step in the evaluation phase is the reflection of measures by which the company can change controllable factors such as product or price and thereby maximize positive and minimize negative impacts of environmental change.

5 MACROENVIRONMENTAL FACTORS

To analyze the external environment of each society means to follow a large number of economic, technological, cultural, legislative and other parameters. It is artistry to find among hundreds of variables those that are the biggest threat or conversely the best opportunity for a particular enterprise.

5.1 Political and legal factors

Given the international nature of aviation and national interests in terms of infrastructure air transport, the factors of political and legal environment are very important elements, which have major impact on all business entities operating in the sector.

Due to political factors, the airlines are affected by general factors, such as:

- political stability, a form of state system;
- the ruling political party, the opposition and its operations;
- economic policy, stance towards private and foreign investments and government policy in relation to industrial cooperation;
- key bodies and government organizations;
- membership in political, economic organizations;
- function of the courts, corruption, crime;

- foreign conflicts, local conflicts and regional instability;
- ethnic confrontation, nationalism, or other manifestations of racial intolerance.

In the legislative, bodies are particularly affected by the legislation regulating the conditions of business, labor relations, business of foreign people and tax liability. For businesses operating in the aviation sector, the focus should be mainly on factors such as:

- regulation and its forms;
- protectionism and its manifestations;
- liberalization of air transport;
- country's membership in organizations, CA;
- terrorism.

5.2 Economic factors

Status of the economic environment affects the ability of airlines to achieve a reasonable rate of profit. All macroeconomic indicators that are monitored at the national level can be considered as his most important factors. Other important indicator of the aviation industry and transport is their share of the economy. The most important factors of the economic environment affecting the subjects of air transport and the aviation industry are:

- economic development;
- cyclical fluctuations in economic development;
- economic and financial crisis;
- natural monopoly;
- tax system;
- increase in competition;
- fuel prices;
- purchasing power of population;
- development of unemployment.

5.3 Social factors

Understanding the impact of social environmental factors is important in terms of behavior of the consumer and of the potential uses of human resources for the enterprise. It also affects the overall development of the enterprise culture. Airlines must draw their attention to the

social environment factors, which undoubtedly include:

- size of the population;
- aging of population;
- migration;
- level of education;
- changes in family structures;
- changes in habits;
- Emancipation of women.

5.4 Technological factors

Air travel would not be possible without the aviation technology and other related technical equipment and resources. It is scientific and technological progress that greatly influenced the development of aviation transport industry and to its current form and it constantly affects it. The technical and technological factors may include:

- development of air transport infrastructure;
- development of aviation technology;
- improving information and reservation system of aviation;
- Internet.

5.5 Environmental factors

Airlines and their activities are part of the environment. Interaction in this case is mutual, the environment affects the business and business has also an impact on the environment. The main environmental factors that affect business aviation operations may include:

- the location and the terrain;
- climate;
- weather cycles;
- occurrence of natural phenomena;
- protected landscape areas;
- fauna and flora;
- population density;
- Distance between populated areas and airports.

Increasingly stringent legislation on the environment, millions investments in "cleaner" technologies, increase of liability for damages largely affect airlines, and have to take measures to reduce environmental risks arising from their

activities. The most important of environmental risks can be considered:

- aircraft noise;
- emissions;
- leakage of fluids;
- accidents;
- impact on fauna and flora.

It is appropriate to draw up a form of the factors of external environment, that can be used to examine factors of specific regional area, the territorial unit of a particular country, or it is possible to mutually compare more regions or countries. Considering the factors above, it is possible to adapt the form as follows (see Table 1. and Tab. 2).

Tab.1 Form for assessment of a country

PESTE factors	Paste state	Current state	Future state
Factor P			
Factor E			
Factor S			
Factor T			
Factor E			

When considering one area or country, the company builds on the previous monitoring period, assesses the current state of a factor and based on these data it tries to predict the future development. In examining the various areas or countries the form can be adjusted so that the individual columns of the table will indicate the country that is under investigation. Such an arrangement allows comparisons between countries and their suitability or unsuitability for a business of particular enterprise.

Tab.2 Form for assessment of more countries

PESTE factors	Country A	Country B	Country C
Factor P			
Factor E			
Factor S			
Factor T			
Factor E			

After editing the form for the required number of columns, we can go to the actual filling of the table cells. Also in this case there are a number of ways. The verbal or numerical rating can be assigned to each factor of the external environment. This assessment may be entered directly into the form. Also in this case, the enterprise can choose entry form that it prefers. The problem with verbal description of each factor is the lack of transparency. It is preferable to use verbal characteristics in the final evaluation report.

The numerical values indicating condition factors, although a more appropriate alternative, but not all factors can be described by the same numerical expression. The clarity of information is not guaranteed by using various forms such as the number, rate, percents, index and so on. The most appropriate way to provide greater clarity is the assignment score, based on a predetermined point scale. The advantage in this case is a uniform data, whether primary factors are characterized by verbal or numerical value. During the processing of data, the main aim is to present them in a form that would allow them to be easily understood and used. Based on the analysis of factors according to the scoring their importance to the company is determined by their importance to the company.

6 CONCLUSION

The problem of analyzing the business environment for the aviation industry entities is of particular importance. Air transport is a sector that is strongly and significantly affected by the legislation and regulatory constraints, it is also the sector that is highly sensitive to economic fluctuations and shaky demand. The external environment of each airline offers opportunities but also a source of danger that the company must take into account when formulating its objectives and adopting strategies for its further development and direction.

Determination of the necessary information on relevant environmental factors, systematic analysis and forecasting environment in the target countries is therefore the first step in strategies development, plans and tasks for marketing research in the airlines.

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