

ISSN: 2090-4274
Journal of Applied Environmental
and Biological Sciences
www.textroad.com

# **Prioritizing Strategies to Enhance Revenues of Iranian Airports**

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> Received: April 20, 2015 Accepted: June 15, 2015

### **ABSTRACT**

**Context:** Air transport is an infrastructural and important component of production – consumption cycle and is categorized in service section of all countries' national system. In recent years, the importance of airport revenues has increased globally and many heavy-traffic airports worldwide are trying to enhance such revenues.

**Objective:** Prioritization of strategies to enhance airport revenues of Iranian airports using FAHP technique.

**Methodology:** Research population is composed of experts and practitioners of Iranian airport companies (n=20). Since the research topic is investigated using phase AHP technique, the population was selected as sample.

**Findings:** Reduction of tariff discounts, increasing airport facilities and welfare equipment (restaurant, stores, etc.), duty freedom and employing expert human resources are ranked first to last, respectively.

**Conclusion:** Respecting the first rank of tariff discount in prioritizing strategies of increasing airport revenues, airport managers can reduce tariff discounts and realize airport revenues tohelp enhance airport incomes.

KEYWORDS: prioritization; strategies; growth; airport revenues

#### 1. INTRODUCTION

Air transport is an infrastructural and important component of production – consumption cycle and is categorized in service section of all countries' national system (Nazarianm, et al. 2010). In recent years, the importance of airport revenues has increased globally and many heavy-traffic airports worldwide are trying to enhance such revenues. So that having a particular view toward developing air transport and endeavor to operate determined goals is a main concern of development planners (Hamzaee and Vasigh, 2000). Cost identification and control is a key factor in helping airports achieve their business goals. An airport must be able to accurately evaluate and revise how it manages its finance and whether it has reached its predetermined goals. The process is in the form a cycle in which every airport should continuously seek ways to reduce costs and increase revenues while preserving its level of safety and service quality. In recent years, many airports decreased their dependence on state capitals and sought novel, aviation unrelated revenues. Airports have found that finance independence is necessary for stable growth and survival in long-term (Dender, 2007). Nowadays, many organizations are challenging financial limitations and this is true in Iranian Company of Airports (Dempsey, 2008). Development and progress of aviation industry requires revenue improvement and enhancement.

In today's world, the role of airport leadership is not only the responsibility to manage an independent and profitable organization but also a commitment toward groups and communities to which airports serve (Graham, 2009). To meet this, financial resources and finance are the most important factors. In other words, revenues resulting from organizational activities determine organization's future direction and influence factors involving all airport functions (Hamzaee and Vasigh, 2000) so that an increase in airport revenues affects service quality and this leads to competitiveness which plays a significant role in improving organizational performance. Thus, presenting and prioritizing strategies to grow and enhance airport revenues is unavoidable. Hence, the main question of the present research is:

How is it possible to prioritize strategies of enhancing airport revenues?

# 2. REVIEW OF LITERATURE

Air transportation industry, among all others and among different modes of transportation is of great importance. Development of airplane fabrication industry and increasing tendency toward moving passengers and goods in the shortest time possible leads to significant advances in air transportation industry, especially during last two decades. Airports are most important and infrastructural section of air transport system and the advent of modern planes, increasing traffic mass, demand for air travel and approval of accurate and integrated regulations on different operational steps of a flight turn airports to complicated and dynamic systems (Hooshyar, 2008).

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With an improving correct understanding of business principles and the cycle of airport finance, airport managers are better able to make decisions to achieve financial independence. The airport must adapt its financial management system to reality take pre-active actions to consider all stakeholders and those involved in risk rate. Hence, the airport should adopt a mutual approach control its costs and enhance its revenues (Butler, 2003).

In a study on airport financial management, Mohajer (2012) proposed that most airports are permanently seeking novel approaches to achieve financial stability and airport managers are better able to make decisions to achieve financial independence through gaining a more accurate understanding of business principles and finance cycle. In a research titled "extracting correct statistics from production origin; cost reduction, airport revenue enhancement", Salimpoor et al (2011) mentioned the importance of accurate information while concluding that extracting correct statistics from production origin leads to cost reduction and airport revenue enhancement. Nazarian et al (2010) investigated the role of air transportation in tourism development emphasizing Uromiye's International Airport and found that tourism development depends on expanding transportation facilities. Saffarzadeh et al (2010) showed that efficiency and service delivery level-based model airport ranking helps airports identify their strengths and weaknesses in all sections, become aware of each airport's rank and recognize available potentials. They also demonstrated that effective factors on efficiency are about three times more important than those affecting service level. Kazempoor et al (2008) examined the effect of data mining on increasing revenues of passing flights in Iranian Airports Holding Company and suggested that proper planning on attracting passer flights (exclusive activity of mentioned company) is of great importance. Kratzsch and Sieg (2011) performed a research on non-aviation revenues and their impact on airport disciplines and regulations and found reduced costs of airports in maximizing the profit of aviation and non-aviation activities. Zenglein and Mulle (2010) studied non-aviation revenues and evaluated airport industry performance and found the importance of such activities for airports. Graham (2009) examined significance of airport's business income and pointed out that non-aviation revenues such as retailing in the airport are considered as the main and most important business resource. In an article on "income-costs viewpoint in operations of airports in the U.S., Hamzaee and Vasigh (2000) proposed that airport pricing is not only influenced by economic factors, but also is affected by political and social factors.

Respecting the importance of prioritizing strategies of increasing airport revenues, the present paper aims to answer the main research question presented below:

How is FAHP technique used to prioritize strategies of increasing airport revenues?



#### 3. METHODOLOGY

### 3.1. Research method

The present study is a descriptive, applied research of survey type. Moreover, since results of the paper can be used practically, it can be considered as an applied case study. Inferential statistics is used here to analyze obtained data. Meanwhile, library and field studies are also used as inseparable scientific research components.

# 3.2. Population and sample

The research population is composed of all experts and practitioners of Iranian Airports Company (n = 20). Since the research topic is examined through AHP technique, the population was used as sample.

#### 3.3. Data and measurement

Localization questionnaire, FAHP-specific pair comparison questionnaire, documents of Iranian Airports Company and interviews with experts are used as data gathering tools.

Respecting the hierarchical structure of research conceptual model, phase hierarchical analysis process and FAHP technique were used to determine significance of factors and prioritizing effective factors on airport

revenue enhancement, respectively. In order to compare effective factors on airport revenue enhancement six oral variables were defined.

### 3.4. Validity and Reliability

Validity and reliability of questionnaires were determined based on literature review and extracting variables (the viewpoint of experts) (Bazargan et al, 1998). The designed localization questionnaire was distributed among at least 10 experts as pretest and then the relativity of indicators to the population was determined having exerted required modifications. Finally, the end questionnaire was designed and used to collect necessary data.

In order to determine the measurement reliability, Compatibility Rate (CR) was used for FAHP questionnaire. The obtained value of CR was 0.10 which is reasonable. Results of calculating the CR are presented below:

 $CR_{AM} = 0.05$ 

 $CR_{Ag} = 0.05$ 

# 3.5. Data Analysis

Using inferential statistic the researcher, in fact, collects and summarizes quantitative data of samples to characterize studied samples. Moreover, Excel software is used to perform FAHP technique.

# 4. Findings

### **Indicators** weights

Table 1: the final weight and rank of each indicator

Factors	Increasing welfare facilities in the airport (restaurant, stores, etc)	Enhancing service quality in terminals, parking lots and transport system	Reducing tariff discounts	Duty freedom	Encouraging investment of private section	Commercializing airport spaces	Recruiting expert human resources	Total
Least possibility								
Final weight								
rank								

As the table shows first to last ranks belong to reducing tariff discounts, enhancing welfare facilities in the airport, duty freedom and recruiting expert human resources, respectively.

## 5. DISCUSSION, CONCLUSION

The role of transportation in different economic, political and social aspects of today's communities is evident. In other words, transportation today is considered as a main basis of international stable development. Air transport industry moves along with scientific and technological advances as well as social, political and economic needs and has reached a high place globally. The present paper prioritized strategies of enhancing airport revenues are prioritized using FAHP technique and results indicated that the mentioned priority, in experts' viewpoint, is in the following order: reducing tariff discounts, increasing welfare facilities in the airport (restaurant, stores, etc.), duty freedom, commercialization of airport spaces, enhancing service quality in terminals, parking lots and transportation systems, encouraging investment of private section and recruiting expert labor. Various studies are performed on enhancing flight revenue, ranking airports based on their efficiency and service levels, non-aviation revenues and their effects on airport regulations, activities of non-aviation revenues and evaluating airport industry performance, importance of airport business revenues, etc. but since the present paper is a pioneer one in Iran, its indicators were not already used by other researchers.

A review on airport characteristics demonstrates that airport can be highly profitable as an economic agency. Organizational managers, especially those in developing countries, have to focus more on revenue gaining mechanisms.

The present paper prioritized strategies of enhancing airport revenues are prioritized using FAHP technique and results indicated that the mentioned priority, in experts' viewpoint, is in the following order: reducing tariff discounts, increasing welfare facilities in the airport (restaurant, stores, etc.), duty freedom, commercialization of airport spaces, enhancing service quality in terminals, parking lots and transportation systems, encouraging investment of private section and recruiting expert labor. Respecting the first rank of reducing tariff discounts it is suggested assign discounts to overall airport tariff to attract flights to Iranian airports (depending on location and type of the airport). In addition, because no budget goes to Airports Holding Company since few years ago and company activities are managed on an income-costs basis, then low tariffs put airports in trouble. Hence, zero airport tariff discounts is helpful in enhancing service quality. Omission or reduction of such discounts as a result of Iranian subsidy reform plan is a part of price freedom and necessary to perform. Reduction of tariff discounts and realization of airport revenues lead to an increase in airport incomes.

Besides, in order to enhance airport revenues it is necessary to note that a main reason of lack of income in most airports is the weakness in airport management systems and deficient capacity of some airport sections, lack of proper information or deficient evaluation of service levels of that section. In order to have accurate and correct management, airport authorities must be aware of its components' performance and overall system. The service involves those presented by authorities to airlines. All these services are specific to airlines and presented to improve their safety and efficiency. The section of airline services is the only section of service levels not directly presented to passengers and hence can't be evaluated in view of this group of users. Effective factors on services of airline section are determined to enhance safety and to serve the system and other parts of every certain airline.

### 6. Suggestions for future research

Ranking airports using FAHP technique based on their efficiency and serving levels Investigating the effect of non-aviation revenues on development and growth of Iranian international airports Presenting a model to evaluate performance of Iranian Airports Company

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