Effects of Air Transportation on Tourism Growth: Iran as case study

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ABSTRACT: Tourism is a new study area which till 1990 few knowledge on it was observed while it is most a widespread service activity which is able to make role in improve public knowledge, further profit and international friendship as well as other industries. One of the effective factors on tourism development is air transportation. Regarding the importance of airports in mobility of passengers and dealing with economic, industry, tourism and so on affairs, it is necessary to survey role of airport and air transportation in accelerating tourism activities in city of Mashhad which is as a hub in Iranian religious tourism. Mashhad has high potential capacity in historical, religious and natural tourism that must be utilized. Approximately 25 million tourists visited Mashhad in 2014 which 8 million of them entered via airport and 1.5 million of the have been foreigners. Thus, in this research we investigate effect of air transportation on tourism growth in Mashhad by hierarchical process of AHP to priority processing of airport instruments in mobilization of tourists that by investigating 9 indices we ranked them as 0.64 for air transportation, 0.27 for railway transportation and 0.07 for overland roads.

Key Words: Air Transportation, AHP model, Airports, Mashhad

INTRODUCTION

Transportation is a key part of tourism which provide crucial relationship channel between tourism producer and tourism destinations and also one of the most popular methods of transportation is air transportation as air transportation and tourism are natural complement. For much of aim-tourist journeys airplane is preferred instrument as well as some other is a unique way to go. Air transportation and tourism should use jointly so both industries affected together in many ways. Modern life is under pressure of time and each facilities could help human to save the time is more valuable especially in commercial and entertainment journeys which air transportation can help so. In internal country trips, airplane preference has increasing trend and in international ones especially in livelong trips is investable. Thus tourism industry in its development way should think of air transportation progresses. The results show that 64% of people are interested in the safety of air carriers use in their travels industry.

MATERIALS AND METHODS

In this research, first we gathered needed data and statistics via library studies, organization, offices and related centers then second we used questionnaire, AHP model and Expert Choice software to ranking of transportation instruments. After gathering, extracting and classifying of data by researchers, we begin to analyzing of data which scientific definition of this stage is “A method which total researches process from choose the problem till reach a result could managed there” (Delavar, 2010). Designed questionnaire is based on line scale and its stability measured by Cronbach alpha. This questionnaire has constituted of 9 indices and 27 question regarding first and second hypothesis and all answered by transportation experts.

Analytical Hierarchy Process (AHP) is a flexible, robust and simple to decide between conflicting decisions in the absence of standards makes it difficult options, is used. The multi-criteria evaluation method, first proposed in 1980 by Thomas L. hour, and already has numerous applications in various fields. AHP analysis is the first part of the selection criteria or criterions. The evaluation criteria are identified as candidates. Options for each of the criteria step Five: analysis of the results to determine the final weight of each of the options and priorities of each of them one of the most important applications of Multi Criteria decision Making, their use in decision-making group.
Table 1. Used instrument during the research

<table>
<thead>
<tr>
<th>R</th>
<th>Method</th>
<th>Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Library Studies</td>
<td>Survey of Books, magazines, scientific journals and internet</td>
</tr>
<tr>
<td>2</td>
<td>Inferential Analysis</td>
<td>EXPERT CHOICE software</td>
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<tr>
<td>3</td>
<td>Field Studies</td>
<td>Questionnaire and field studies</td>
</tr>
</tbody>
</table>

Resource: current research

Figure 1 it shows that 0.67 of people are interested to use air transportation in trip to Mashhad as well as 0.27 by railway and 0.07 percent for overland roads.

![Figure 1. Expert Choice software output](chart.png)

Chart 1. Final weight to ranking transportation methods
Figure 2. compare of road and airplane indices

<table>
<thead>
<tr>
<th>Selections</th>
<th>railway</th>
<th>road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airplane</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Overland</td>
<td>5</td>
<td></td>
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</tbody>
</table>

Regarding the obtained results we can conclude that utility of airplane is triple more than railway and 7th time more than overland roads. Thus in different trips, air transportation is preferred and railways is second and overland roads is third.

Table 2: comparing indices by use of AHP model show that security index is most important criteria to choose transportation facility as well as safety as second criteria. Also other important criteria are as passenger comfortably and cost of mobility. Based on passenger preference in selecting airplane as number first transportation instrument and comparing different criteria in their preference we can conclude that their preference is rational.

Table 3: comparing indices

<table>
<thead>
<tr>
<th>indices</th>
<th>Delaying</th>
<th>mobility</th>
<th>cost</th>
<th>safety</th>
<th>comfortably</th>
</tr>
</thead>
<tbody>
<tr>
<td>security</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>comfortably</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
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<tr>
<td>safety</td>
<td>3</td>
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<tr>
<td>cost</td>
<td>2</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>mobility</td>
<td>3</td>
<td></td>
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</table>
Conducted researches show that air transportation is more used than other possible transportation selections as it is better in security and safety areas.

Today between different ways of transportation, air transportation has increasing importance trend as it help the human to save time and reach in destination sooner. With surveying of tourism and air transportation structures in this area we observed that these have evolved themselves to coordinate with modern situation as answer to possible maximum demands of customers. One of the most popular religious tourism destinations is Imam Reza tomb located in mega city of Mashhad. As mentioned before approximately 25 million tourists have
visited Mashhad in 2014 and it is prospects reach to 40 million in next few years. In fact more than 0.64 of them arrived by airplane and Hasheminejad international airports is second in a country in transition volume as more than 5 million passengers transported there in 2012. (Iran Statistical Yearbook, Statistical Yearbook of Khorasan Razavi, transportation and communication 1391.)

The results show that most of passengers used air transportation in trip to Mashhad as it is more secure and safe so it is number first choice and preferred.

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