

## Identifying the Role of Industry Context Factors in Exploitation of Business Opportunities in Tourism of Mashhad

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**Abstract:** The current study attempts to identify the role of industry context factors in exploitation of business opportunities in tourism of Mashhad. This identification process comprises of investigating the effects of knowledge conditions, demand conditions, industry life cycle, appropriability, industry structure, attractions of tourism industry, infrastructures related to tourism, and unique characteristics of tourism subsections in exploiting business opportunities in tourism industry of Mashhad. The results show that all the factors have a direct significant effect on exploitation of business opportunities in tourism industry. The simultaneous effects of all variables on dependent variable were examined. In the main question, the effects of all factors in industry on exploitation of business opportunities were analyzed. Path analysis method was used to answer this question. The results of this part show that linear combination of independent variables can significantly explain and predict the variations of dependent variable, and that the input variables in the model could express 84% of changes of the dependent variable.

**Key words:** Exploitation of business opportunities, Tourism, Position of knowledge, Demand conditions, Industry lifetime, Capability level, Industry structure, Tourist attractions, Tourism infrastructures

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### INTRODUCTION

Today tourism is one of the key economic activities, and is considered to be the most important driving factor in the development of countries and attractive regions. World travel and tourism forum announced in 2010 that tourism industry with more than 255 million employees is the largest employer in the world. The huge capacities of tourism to improve employment in Iran, is an important subject to be considered. Hence one of the preoccupations of officials and decision-makers in the field is to identify existing capacities, promote the quality of destination in order to develop tourism markets, and finally to move towards sustainable national and regional development. This matter has a long background in Iran, but the efforts have not yet yielded any considerable result. (Ghadami. 2010)

In this respect, Mashhad as the second largest religious city in the world and the center for domestic religious tourism (Cultural Heritage, Handicrafts and Tourism-Head Office of Khorasan Razavi-Iran, 2009) attracts almost twenty million pilgrims annually. Despite the importance and function of the holy city of Mashhad in the development of tourism in national and international markets, it has a number of weaknesses and deficiencies in satisfying visitors' demands as a key factor in sustainable development of the destination (Ghadami, 2010). Thus, lack of appropriate and timely response to the needs of tourists can damage the economic framework of tourism in Mashhad. This reveals the urgent need of research in this field.

The main purpose of this study is to identify the role of industry context factors in exploiting the business opportunities of tourism in Mashhad. This process involves investigating the influence of knowledge conditions, demand conditions, industry lifetime, capability, industry structure, and unique features of tourism subsections in exploiting the business opportunities in tourism of Mashhad.

#### *Literature Review:*

This paper attempts to identify the role of industry context factors in exploiting the business opportunities in tourism of Mashhad. Thus, it is necessary to mention here the theories explaining the relevant concepts associated with the tourism industry in particular, as well as those dealing with business opportunities in tourism. Also, the authors will attempt to present their theoretical justifications.

#### *Exploiting Business Opportunities:*

Exploiting an opportunity consists of activities and investments that result in return of the capital gained from a new product using a new method. Exploiting the opportunities is an essential step in creating a successful

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business in employment process. Discovering an employment opportunity is a necessary condition for creating jobs, but not sufficient. Following the discovery of an opportunity, an entrepreneur should decide on exploiting it. In particular, exploiting an opportunity is more common when there is a high demand, profit margin of industry is high, technology is in its youth, opportunity to compete in a specific area is neither too low nor too high (Hannan and Freeman, 1984), and investment cost is low. All potential entrepreneurs do not exploit valuable opportunities in the same manner. Making a decision on how to exploit an opportunity involves weighing the opportunity value against costs of producing value and also costs of producing value in other scenarios (Amit, Mueller, and Cockburn, 1995; Reynolds, 1987).

***Industry Context Factors and Aspects:***

In some industries there is a stronger tendency towards exploiting the opportunities by creating new businesses, but the characteristics of these industries which boost the creation of businesses are unknown. Thus, in answer to this question, researchers have studied a smaller group of differences between industries that help the business creation. These differences are categorized in five groups (Shane, 2003):

- a) Knowledge conditions;
- b) Demand conditions;
- c) Industry life cycle;
- d) Appropriability condition;
- e) Industry structure

***Knowledge Conditions:***

Researchers claim that basic knowledge condition in an industry affects exploiting opportunities through creating firms in that industry (Winter, 1984). Knowledge condition is an aspect of the industry which affects data collection on producing outputs or services.

Researchers believe that industries are on a diverse range of knowledge positions including implicit knowledge in the mind of the people working in the industry, or documented knowledge that can be recorded. Also industries are different in the uncertainty related to knowledge creation or in the knowledge of output products in every input unit (Shane, 2003).

***Demand Conditions:***

Changes in demand which is the result of changes in culture, tastes, status or position, can create opportunities to create new businesses. This is because producers need to know their customers preferences and respond to them (Kirzner, 1997). First, if demand is high, it is possible that opportunity's value increases due to the economics of scale. When other factors are invariant, if the market scale is higher, the expected value will be more. Second, if demand is more than supply, this can create opportunities to increase capacity. Third, a growth in demand can facilitate the creation of market corners (Christensen & Bower, 1996), because demand growth provides a chance for the firms to become specialized.

***Industry Life Cycle:***

The third theoretical aspect related to industry characteristics and business creation rate is the industry life cycle. Researchers state that industry life cycle affects the the presence of entrepreneurial opportunities in industries. When the industries are young, there are few firms and establishing new ones is very common. As the industry becomes older and more developed, they tend to have more companies and creating new firms is less common (Shane, 2003)

***Appropriability Conditions:***

Researchers state that appropriability also affects the exploitation of an opportunity in an industry. appropriability is the characteristics of an industry which allow entrepreneurs to receive the results of their attempts to exploit an opportunity. However, if entrepreneurs observe the potential in new combination of the sources, and believe that they can get the necessary results from these actions, they may only manipulate the combination (Levin, Klevorick, Nelson, and Winter, 1987).

***Industry Structure:***

Researchers state that industry structure affects the exploitation of an opportunity in an industry. Industry structure is a series of characteristics which affect long-term competitive mechanisms, cost structure and profitability of an industry. Primary researches have studied six aspects of industry structure which affect creation of a new firm (Shane, 2003):

Profitability of industry; Inputs cost; Amount of capital used; Amount of advertisement applied; Industry focus; Average firm size;

Now we study the theoretical framework of each aspect:

***Profitability of Industry:***

When the industry is more profitable, creating a new firm is more common. High profit margins increase the likelihood that a recombination will be profitable, making people more probable to undertake such efforts. Moreover, when an industry is more profitable, an entrepreneur can enter the industry with an uncertain opportunity and be more likely to remain above minimum average cost while the opportunity is being developed.

***Cost of Inputs:***

When an industry has lower cost inputs, it has more plentiful opportunities are available to form firms. In a situation where the input cost is low, one can reach his necessary resources to exploit an opportunity. The numbers of people who exploit business ideas in industries in which firms have low cost structures are far greater than those in which businesses have high cost structures.

***Capital intensity of the Industry:***

New organizing efforts are inhibited by the capital intensity of an industry. The development and initial exploitation of an entrepreneurial opportunity results in negative cash flow for a certain period of time, as the venture incurs the cost of plant and equipment, and employees to develop an opportunity, but does not yet generate revenues. Empirical research supports the proposition that capital intensity discourages new organizing efforts. On the other hand, industry capital intensity increased the likelihood of new establishment failure (Shane, 2003).

***Advertisement intensity of the Industry:***

New firm formation is less likely in advertising intensive industries for two reasons. First, brand reputations are developed over time through the cumulative effects of advertising. As a result, new entrants can't build their brand names to the level of established firm brand names quickly. Second, size creates scale economics in advertising, making small firms less efficient at advertising than large firms. Because new ventures tend to begin small, their advertising efforts are less efficient than those of established organizations. These two patterns mean that people are less likely to form new firms in industries in which they need to rely heavily on advertising (Shane, 2003).

***Industry Concentration:***

Concentrated industries have lower levels of new firm formation than more fragmented industries. When markets are concentrated, new ventures are more likely to directly challenge the customer base of powerful incumbents that have the resources to drive them out of business before they have gained a foothold in the market. As a result, people often decide that it is not worthwhile to exploit opportunities in concentrated industries that they would exploit in more fragmented industries (Shane, 2003).

***Average Firm Size:***

New firm formation is less common in industries with larger average firm size.

New organizing efforts are enhanced by low average firm size for several reasons.

First, the capital constraints facing new organizing efforts increase with firm size because efforts to exploit opportunities through larger firms require more capital than efforts to exploit opportunities through smaller firms.

Second, the incentive advantages that new organizing efforts have over established firms that result from their superior ability to distribute equity decrease with firm size. Third, the organizing constraints and risks facing entrepreneurs make it difficult to establish ventures on a large scale (Shane, 2003).

***The Role of Most Important Factors of Industry Context in Tourism:***

***Industry Structure:***

Increase in the number of travel agencies will cause the increase in tourism exchange earnings and the role of agencies is confined to promoting, advertising, guiding the tourist and introducing the attractions. Thus, the growth in their quantity and improvement in their quality will influence the number of tourists who visit Iran (Taghavi and Gholipour, 2008). The results of Taghavi and Gholipour's research demonstrate the influence of advertisement on tourism.

Investing in tourism industry requires a great deal of money and also many years for the investment to be returned. Thus, fixed costs are high compared to other costs, and accordingly investment risk ratio will increase. In fact a tourism firm must be financially flexible so that in case of pecuniary problems or unexpected events, it would have the ability to continue its economic path (Forghandoust, Rezvani and Hashemi, 2009).

***Demand Conditions:***

In tourism, demand is highly influenced by non-economic factors. Political unrests, terrorism and spread of special diseases are amongst the reasons that can seriously harm tourism industry of a region (Forghandoust, Rezvani and Hashemi, 2009).

***Appropriability:***

Tourism is an umbrella industry and this is considered as one of its critical points, because failure in providing any of the services related to tourism causes some restrictions in demand for other products and services of this industry. For example, if there is no proper accommodation service in a destination, then the good performance of transportation system, food service capacity, local attraction facilities and the ability within the tourism offices and service units will be almost fruitless (Ranjbarian and Zahedi, 2005).

***Tourist Environment Attraction:***

Tourist environment attraction demonstrates the feelings and beliefs of visitors about the destination ability to satisfy their needs (Vengesai, 2003). It encourages people to visit the place and spend their time there. So its most important effect is to attract tourists.

***Tourism Infrastructures:***

Travel and tourism are highly dependent on infrastructures such as airport, roads, railways, ports and also hotels, markets, and amusement facilities (Australia Tourism and Transport Forum, 2010). The combination of tourism and suitable infrastructures will support economic, environmental and social interests. When an area is chosen and developed as a convenient place for tourists, proper infrastructures will be required for better quality and economic growth of travel and tourism (Australia tourism and Transport Forum, 2010).

***The Influence of Unique Characteristics of Each Subsection on Business Performance:***

Tourism industry consists of various businesses and companies which provide tourists with different kinds of activities and experiences (Uriely, 2005; Cohen, 1979). Different firms have the specialty in organizing tours, events, cultural activities and accommodation. This incompatibility is also seen in small business sector as well. For instance, rural tourism companies that benefit from open space, nature, and untouched agricultural resources, can enable small scale institutions to present multifaceted activities.

***Literature Review:***

Examining the incentives, proposed by other researchers, which affect the entrepreneurship process Shane, S. Locke & A. Collins (2003) have caused a major change in the way effective variables have been looked at, and paid attention to other incentives which have been neglected before. In addition to demonstrating the main reasons for examining these incentives, they have studied major weaknesses that restricted predictability of previous researches, and finally have proposed clear solutions for future researchers to solve this problem.

Based on the analysis of the interrelation between tourism and economic variables, and analyzing effective factors in exploiting tourism-based opportunities in an ancient Chinese village, Wu Wen-Zhi & Zhuang Zhi-Min (2003) have suggested a new systematic framework of experienced innovation in presenting tourism products.

Petersen & Getz (2004) have attempted to recognize growing entrepreneurs and the factors affecting profitability by conducting a survey between family business stakeholders in tourism industry in two areas (one in Canada and the other in Denmark). In both instances profitable and growing tendencies between purchasable businesses, especially accommodating institutes and restaurants, are considerably high. This research has particularly demonstrated that businesses based on accommodation and handicrafts are highly related with lifestyle and autonomy.

Using organization theory, sociology and entrepreneurship views, Meek, Pacheco and York (2009) have constructed a model of relationship between centralized and decentralized organizations in entrepreneurship. In their research they have shown that decentralized institutions which have been socially designed by officials, are significant in promoting environmentally new businesses. The findings have also shown that state policies supporting entrepreneurship is related to social norms common to entrepreneurship environment. In this paper, entrepreneurship theory and the study of entrepreneurship and natural environment is extended by exhibiting the role of social norms in forming new institutions. It seems that these factors are completely considered in Shane's model.

Edelman and Yli-Renko (2010) have considered two contradictory theories of entrepreneurship. They have stated that objective environmental conditions are considered as the source of entrepreneurship opportunities, and on the contrary based on perceptions of entrepreneurship they have shown that experimental studies have used these viewpoints separately; but little attempts have been made to merge these two theories to experimentally examine the interrelationship between environmental conditions, perceptions of entrepreneurship, entrepreneurship activity and the results. By this, they have studied the role of objective

environmental conditions and perceptions of entrepreneurship in accessing opportunities and sources in the process of forming firms. Using serial data of new entrepreneurs, they confirm this hypothesis that perception of entrepreneurs' opportunities is the intermediate between environmental objective characteristics and entrepreneur's attempts to start a business. Unlike researchers' expectations, the study does not corroborate a similar research to access resources.

***Methodology:***

The purpose of this study is developmental and the data collection is mixed exploratory (qualitative - quantitative). The data can be collected by various methods, in different places and from many kinds of resources. The main methods include interview, questionnaire, observing people and events, and using existing documents and all of them are used in field researches (Shane, 2001). In this paper the qualitative part is composed of interviewing experts and scholars in tourism industry of Mashhad and the quantitative part consists of descriptive-survey method and questionnaire.

This study has been conducted on tourism industry of Mashhad in the first seven months of 1390 and is an attempt to identify the role of industry context on the effective factors in exploiting business opportunities. Statistical population of the research includes regional authorities in tourism industry, investors and managers of existing businesses in tourism and entrepreneurs who like to exploit the opportunities in tourism industry. In the first step the questionnaires received from owners of existing businesses in five different fields of accommodation, entertainment, handicraft and souvenir, transportation and information providing managers will be considered.

Since the population size is large and evaluating the views of all members is not feasible in terms of time, cost, etc..., so we want to achieve samples for which extracting the results by means of statistical and sampling techniques is trustworthy. On this basis and according to the structure of the abovementioned population and to increase the accuracy, it was decided that in the present research random sampling method will be used.

In the present study a questionnaire has been prepared to study the role of industry in exploiting the business opportunities in tourism of Mashhad, in which questions related to every variables of industry affecting the exploitation of tourism businesses have been proposed.

This questionnaire consists of three parts. In the first part general questions concerning gender, age, and education have been proposed. In the second part the question is how the influencing industry context factors affect the exploitation of tourism business opportunities; it is designed based on Likert scale and has five options, namely very high, high, medium, low and very low. In the third part the condition of tourism in Mashhad in terms of key factors such as investment, success probability in business, etc... are investigated. This part is also designed based on Likert scale and has five options namely very high, high, medium, low and very low.

To validate the content the questionnaire has been given to six experts and they all have confirmed its validity. To corroborate its reliability it was first distributed between a random sample by means of a pre-test and then using SPSS software, the Cronbach's alpha coefficient was calculated. The calculated Cronbach's alpha is 0.82 which shows that questionnaires have very high reliability.

***Independent Variable:***

The independent variables of the research include: knowledge position, demand conditions, industry life cycle, appropriability, industry structure, attraction of tourism environment, infrastructures related to tourism, unique features of tourism subsections.

***Dependent Variable:***

The dependent variable in this research is exploitation of business opportunities in tourism industry of Mashhad.

***Data Analysis:***

To analyze the qualitative data of the research (the results of interview), the theoretical coding method was used. Coding refers to the process of analysis from which concepts are distinguished, and their characteristics are discovered in the data (Taghizadeh and Mohamadian, 2008). The process of data analysis was accomplished in two steps, namely open coding and axial coding. Open coding refers to the part of the job in which phenomena are categorized from short notes and its final result is the naming and classifying of the concepts (ibid.). After this, the concepts achieved from open coding are related. This step is called axial coding. The coding tables for qualitative data and the literature confirm the axial coding achieved in appendix A (results from interview).

This research attempts to answer 9 questions of which one the main question. In the following they will be analyzed and answered using statistical methods. To answer the secondary questions, fitting regression model was used and to find the answer for the main question path analysis method is used. The path analysis method is

an extension of regression which in addition to expressing the direct effects, can express the indirect effects and the total effect of each independent variable for dependent variables; and interpret the observed relations and correlations between them in a logical way. It is necessary to say that path analysis is one of the statistical tests which are known as structural equations model. To analyze the data in this research, SPSS<sub>v17.0</sub> was used.

**Discussion of Secondary Questions:**

1. What is the effect of knowledge condition in exploiting the business opportunities in tourism industry of Mashhad?

To answer this question a model will be presented, using regression, to examine the effect of knowledge conditions variable on dependent variable (exploitation of business opportunities). Thus, the following hypothesis test is made:

H<sub>0</sub>: The knowledge condition variable does not have a significant linear effect on the response variable

H<sub>1</sub>: The knowledge condition variable has a significant linear effect on the response variable

Using the variance analysis presented in Table.1, the result of the above hypothesis test will be given.

**Table 1:** Variance analysis of linear relation between knowledge conditions variable and response variable.

Source of variation	Sum of Squares	Degree of Freedom	Average of Squares	Test Statistic	P-Value
Regression	125.392	1	125.392	271.62	0.000
Error	130.654	283	0.462		
Total	256.046				

Research Result source:

According to the above table p-value is 0.000 and it is smaller than the assumed level of significance, namely 0.05. Thus, the null hypothesis is rejected and it is possible to introduce a regression model based on existing variables.

After estimation, using least squares method, the regression model parameters are obtained as reported in Table.2.

**Table 2:** Estimation of Regression Model coefficients (knowledge conditions variable).

	Estimation of Parameter	Test Statistic	P-Value
Regression Constant	1.096	7.236	0.000
Knowledge Conditions	0.708	16.480	0.000

Research Result source

R<sup>2</sup>= 0.49

According to the reported p-value for significance of knowledge conditions variable, it can be concluded that for one unit increase in knowledge conditions variable, the exploitation of business opportunities variable will have an increase of 0.708. According to the value of R<sup>2</sup> of the model (coefficient of determination) it can be stated that the regression model of knowledge variable can explain 49% of response variable variations.

Based in the above results, one can answer the first question as follows: Knowledge conditions have a direct significant effect on exploitation of business opportunities in tourism industry.

2. What is the effect of demand condition on exploitation of business opportunities in tourism industry of Mashhad?

**Table 3:** Variance analysis of linear relation between demand conditions variable and response variable.

Source of variation	Sum of Squares	Degree of Freedom	Average of Squares	Test Statistic	P-Value
Regression	168.525	1	168.525	544.926	0.000
Error	87.521	283	0.309		
Total	256.046				

Research Result source

**Table 4:** Estimation of Regression Model coefficients (demand conditions).

	Estimation of Parameter	Test Statistic	P-Value
Regression Constant	0.794	6.583	0.000
Demand Conditions	0.777	23.344	0.000

Research Result Source

R<sup>2</sup>= 0.66

Demand conditions have a direct significant effect on exploitation of business opportunities in tourism industry.

3. What is the effect of industry life cycle on exploitation of business opportunities in tourism industry of Mashhad?

**Table 5:** Variance analysis of linear relation between industry life cycle variable and response variable.

Source of variation	Sum of Squares	Degree of Freedom	Average of Squares	Test Statistic	P-Value
Regression	113.345	1	113.345	224.783	0.000
Error	142.701	283	0.504		
Total	256.046				

Research Result source

**Table 6:** Estimation of Regression Model coefficients (life cycle conditions).

	Estimation of Parameter	Test Statistic	P-Value
Regression Constant	1.909	16.689	0.000
Industry Life Cycle	0.495	14.993	0.000

Research Result Source

$R^2= 0.44$

Based on the above model we can state that one unit increase in industry life cycle cause 0.495 unit increase in exploitation of business opportunities variable. According to the value of  $R^2$  of the model (coefficient of determination) it can be stated that the regression model of industry life cycle variable can explain 44% of exploitation of business opportunities variable variations.

Based on the above results, we can answer the third question as follows:

Industry life cycle has a direct significant effect on exploitation of business opportunities in tourism industry of Mashhad.

4- What is the effect of appropriability in exploitation of business opportunities in tourism industry of Mashhad?

**Table 7:** Variance analysis of linear relation between industry life cycle variable and response variable.

Source of variation	Sum of Squares	Degree of Freedom	Average of Squares	Test Statistic	P-Value
Regression	160.790	1	16.790	477.697	0.000
Error	95.256	283	0.337		
Total	256.046				

Research Result source

**Table 8:** Estimation of Regression Model coefficients (life cycle conditions).

	Estimation of Parameter	Test Statistic	P-Value
Regression Constant	1.329	12.630	0.000
Appropriability	0.670	21.856	0.000

Research Result Source

$R^2= 0.63$

According to above results we can answer question 4 as follows:

Appropriability has a direct significant effect on exploitation of business opportunities in tourism industry.

5- What is the effect of industry structure in exploitation of business opportunities in tourism industry of Mashhad?

**Table 9:** Variance analysis of linear relation between industry structure variable and response variable.

Source of variation	Sum of Squares	Degree of Freedom	Average of Squares	Test Statistic	P-Value
Regression	163.738	1	163.738	501.992	0.000
Error	95.308	283	0.326		
Total	256.046				

Research Result source

**Table 10:** Estimation of Regression Model coefficients (industry structure).

	Estimation of Parameter	Test Statistic	P-Value
Regression Constant	0.772	6.104	0.000
Industry Structure	0.788	24.405	0.000

Research Result Source

$R^2= 0.64$

Industry structure has a direct significant effect on exploitation of business opportunities in tourism industry.

6. What is the effect of attractiveness of tourism environment in exploitation of business opportunities in tourism industry of Mashhad?

**Table 11:** Variance analysis of linear relation between industry structure variable and response variable.

Source of variation	Sum of Squares	Degree of Freedom	Average of Squares	Test Statistic	P-Value
Regression	85.992	1	85.992	501.992	0.000
Error	170.054	283	0.601		
Total	256.046				

Research Result source

**Table 12:** Estimation of Regression Model coefficients (attractiveness of tourism environment).

	Estimation of Parameter	Test Statistic	P-Value
Regression Constant	1.942	14.034	0.000
Attractiveness of tourism environment	0.541	11.963	0.000

Research Result Source  $R^2 = 0.34$

Attractiveness of tourism environment has a direct significant effect on exploitation of business opportunities in tourism industry.

7. What is the effect of infrastructures related to tourism in exploitation of business opportunities in tourism industry of Mashhad?

**Table 13:** Variance analysis of linear relation between infrastructures related to tourism variable and response variable.

Source of variation	Sum of Squares	Degree of Freedom	Average of Squares	Test Statistic	P-Value
Regression	131.956	1	131.956	300.941	0.000
Error	124.090	283	0.438		
Total	256.046				

Research Result source

**Table 14:** Estimation of Regression Model coefficients (infrastructures related to tourism).

	Estimation of Parameter	Test Statistic	P-Value
Regression Constant	1.571	13.299	0.000
Infrastructures related to tourism	0.547	17.348	0.000

Research Result Source  $R^2 = 0.52$

Infrastructures related to tourism have a direct significant effect on exploitation of business opportunities in tourism industry.

8. What is the effect of unique characteristics of tourism subsections in exploitation of business opportunities in tourism industry of Mashhad?

**Table 15:** Variance analysis of linear relation between unique characteristics of tourism subsections variable and response variable.

Source of variation	Sum of Squares	Degree of Freedom	Average of Squares	Test Statistic	P-Value
Regression	131.956	1	131.956	300.941	0.000
Error	124.090	283	0.438		
Total	256.046				

Research Result source

**Table 16:** Estimation of Regression Model coefficients (unique characteristics of tourism subsections).

	Estimation of Parameter	Test Statistic	P-Value
Regression Constant	1.571	13.299	0.000
Attractiveness of tourism environment	0.547	17.348	0.000

Research Result Source  $R^2 = 0.34$

Unique characteristics of tourism subsections have a direct significant effect on exploitation of business opportunities in tourism industry.

**Discussion of the Main Question:**

In previous section we studied the relation between eight variables and exploitation of business opportunities, and in this part we will examine the simultaneous effects of all variables on the dependent variable.

*How do the industry context factors influence the exploitation of business opportunities in tourism of Mashhad?*

To answer this question the path analysis method is used. In fact the path analysis specifies how much each independent variable influences the dependent variable directly or indirectly. Thus, the path analysis enables us to understand the compatibility of variables' influence.

To perform the path analysis, first we fit a regression between the dependent variable (exploitation of business opportunities) and independent variables; and to draw its chart we use significant standard parameters estimation. The result of variance analysis and independent variables coefficients estimation is reported in Table.17.

As it is shown in Table.17 the p-value of regression is smaller than test level 0.05, so it can be seen that the linear combination of dependent variables can significantly explain and predict the variations of dependent variable, and the entered variables in the model could explain 84% of the variations of dependent variables.

Thus fitting regression model to research variables is significant and because the probability value of dependent variables coefficient is smaller than 0.05, all independent variables are essential in the model.



**Table 17:** Estimation of regression model coefficients with eight variables.

	Standard parameter Estimation	Test Statistic	P-Value
Knowledge Conditions	0.221	7.120	0.000
Demand Conditions	0.221	5.062	0.000
Industry Life Cycle	0.073	2.124	0.035
Appropriability	0.188	4.523	0.000
Industry structure	0.145	3.326	0.001
Attractiveness of Tourism Environment	0.102	3.431	0.001
Infrastructures Related to Tourism	0.084	2.224	0.027
Unique Characteristics	0.106	2.893	0.004

R<sup>2</sup>=0.84                      P-Value=0.000                      F=184.552

In this step among the significant variables, the one that has the most value of standard parameter is selected as the dependent variable, which is knowledge conditions variable (as the test statistic is larger than demand conditions variable). The seven remained variables are considered as independent variables and the regression model is fitted on them and the results are shown in Table.18.

**Table 18:** Estimation of regression model with seven remained variables.

	Standard parameter Estimation	Test Statistic	P-Value
Demand Conditions	0.114	1.356	0.176
Industry Life Cycle	-0.049	-0.741	0.460
Appropriability	0.250	3.171	0.002
Industry structure	0.090	1.045	0.297
Attractiveness of Tourism Environment	0.091	1.045	0.297
Infrastructures Related to Tourism	0.206	2.683	0.005
Unique Characteristics	0.054	0.760	0.448

R<sup>2</sup>=0.84                      P-Value=0.000                      F=184.552

According to the results of Table.18, and because the probability value is smaller than test level, fitted regression to variables is significant, and among the seven existing independent variables in them model, the effect of demand conditions, industry life cycle, industry structure, attractiveness of tourism environment and unique characteristics are insignificant (because probability value is larger than test level 0.05), and only the presence of appropriability and infrastructures related to tourism in the model is significant. Now, as before, between the two remained variables in the model, the one with the more standard parameter estimation is selected as the dependent variable and regression model is fitted to it; the results of fitting regression model to independent variable of infrastructures related to tourism to appropriability is given in Table.19.

**Table 19:** Estimation of regression model coefficients with infrastructures related to tourism.

	Standard parameter Estimation	Test Statistic	P-Value
Infrastructure related to tourism	0.584	12.095	0.000

R<sup>2</sup>= 0.34                      P-Value=0.000                      F=146.298

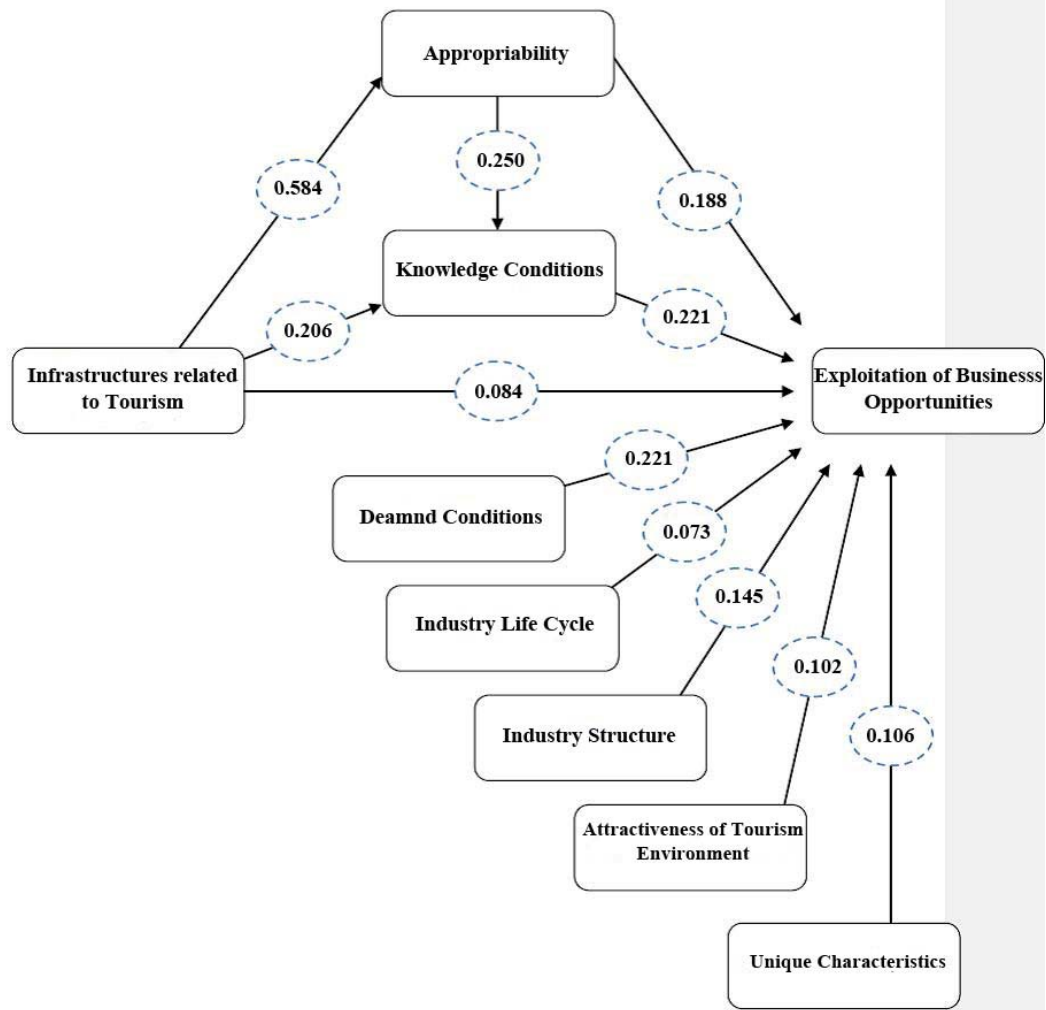
Now that we have identified the relations between research variables, we can draw the path analysis chart to specify the direct and indirect effects of dependent and independent variables. The path analysis of variables in this research can be seen in the following chart.

Now that the analyzed model is complete, we can calculate the direct and indirect effects of independent variables on dependent variable. As it is seen in path analysis chart, we can separate the variables that have direct or indirect effects. According to this chart it can be said that the appropriability variable and infrastructures related to tourism variable have indirect effect while other variables have only direct effect on exploitation of business opportunities.

To calculate indirect effects of independent variables, path coefficients of all variables in a path leading to the dependent variable are multiplied and if these coefficients are added to direct coefficients of every variable, the sum will be the total effect of independent variable on dependent variable. Total effect (separated by direct and indirect effect) of independent variables is reported in Table.20.

**Research Result Source:**

As it can be seen in the above table, although knowledge conditions variable and demand conditions have the most direct effect on response variable, but after calculating indirect effects of independent variables it can be seen that appropriability has the most total effect on response variable; and also infrastructures related to tourism variable that has a small effect on exploitation of business opportunities variable, has an indirect effect on appropriability and knowledge variable and totally has a relatively good effect on response variable.



**Chart 1:** Path analysis of research variables.

**Table 20:** Effect of independent variables (path coefficients) on dependent variable.

	Direct Effect	Indirect Effect	Total
Knowledge Conditions	0.221	---	0.221
Demand Conditions	0.221	---	0.221
Industry Life Cycle	0.073	---	0.073
Appropriability	0.188	0.055	0.243
Industry Structure	0.145	---	0.145
Attractiveness of tourism Environment	0.102	---	0.102
Infrastructures related to Tourism	0.084	0.105	0.189
Unique Characteristics	0.106	---	0.106

**Conclusion and Result:**

As it was mentioned, the current research attempts to find the answer to eight secondary questions and one main question. To answer the secondary questions the fitting regression model was applied and to answer the main question path analysis was used. The first sub-question deals with how knowledge conditions affect exploitation of business opportunities in tourism industry of Mashhad. The results of the study show that knowledge conditions have a direct significant effect on exploitation of business opportunities.

Studying the effect of demand conditions on exploitation of business opportunities in tourism industry of Mashhad was dealt with in the second sub-question and it was shown that demand conditions have a direct significant effect on exploitation of business opportunities in tourism industry.

The third sub-question tested the effect of industry life cycle on exploitation of business opportunities in tourism industry of Mashhad. The results show that industry life cycle has a direct significant effect on exploitation of business opportunities. In spite of this effect, the coefficient of this variable is smaller than other variables.

The effect of appropriability on exploitation of business opportunities was addressed in fourth sub-question. The results show that this is a direct significant effect.

Industry structure has a direct significant effect on exploitation of business opportunities. Coefficient of determination in regression model of industry structure variable is considerable, and based on the perspective of business owners, one of the reasons for its share is the high profitability of tourism industry in Mashhad.

The attractiveness of tourism environment variable has small explanation. This not only causes ambiguity in the questions, but also tells an important point; that is the central role of pilgrimage as the leading and most effective purpose for travelling to Mashhad, which casts a shadow on other attractions of the city.

The seventh sub-question dealt with the effect of infrastructures related to tourism on exploitation of business opportunities in tourism industry of Mashhad. The results of the study show that infrastructures have a direct significant effect on exploitation of business opportunities in tourism industry.

The effect of unique characteristics of tourism subsections on exploitation of business opportunities in tourism industry of Mashhad was examined in eighth question. The results show that unique characteristics of tourism subsection has a direct significant effect on exploitation of business opportunities.

The main question of the research was the simultaneous effect of all variables on dependent variable, and was dealt with separately. In the main question the effect of industry context factors on exploitation of business opportunities in tourism industry of Mashhad was explored, and to answer this question path analysis method was used. The results show that linear combination of dependent variables can significantly explain and predict the variations of dependent variable and entered variables in the model can explain 84% of the variations of dependent variable. Among the significant variables, knowledge conditions variable (because test statistic was larger than demand conditions variable) was considered as the dependent variable and the other seven were considered as the independent variables, and regression model was fitted on them. Results show that from the seven independent variables in the model, the effect of demand conditions, industry life cycle, industry structure, attractiveness of tourism environment and unique characteristics are insignificant in the model and only the presence of appropriability and infrastructures related to tourism is significant in the model. Then between appropriability and infrastructures related to tourism, the appropriability variable was selected as the independent variable (because of the value of its standard parameter estimation) and infrastructures related to tourism variable was selected as the dependent variable. The results show that infrastructures related to tourism has a significant effect on appropriability variable. Investigating the effect of independent variables on dependent variable, we observed that three variables namely appropriability, knowledge conditions and demand conditions have the most direct and indirect effect on response variable. The most convincing reasons for the above finding are stated below:

A- It cannot be denied that creating products and offering innovative services has an essential effect on developing the market size and attracting more pilgrims to the city of Mashhad.

B- Tourism industry is affected by different conditions such as political, cultural, etc... and this is one of the reasons that knowledge conditions variable has an effect on response variable.

C- Changing the tax on services in tourism industry affects the attraction of tourist and pilgrims (market size), in addition to destabilizing business owners' condition and losing their trust.

D- The great number of pilgrims visiting the city of Mashhad is one of its distinctive features (as the spiritual capital of Iran) has an undeniable effect on demand conditions variable and appropriability.

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**Appendix A:**

**Table 1-A:** Qualitative Data Coding (results from interview).

Number	Statements	Open Coding	Axial Coding
1	1-1	Because of low average age in Iran there is a need for other attractions around the Holy Shrine.	Tourism Environment Attractions
	1-2	Creating new attractions, especially in the field of entertainment and man-made attractions, contributes significantly to establishing and expanding new businesses.	
	1-3	Large attractive commercial centers play an important part in attracting tourists and pilgrims and establishing new businesses.	
	1-4	Creating amusement centers to increase lasting time	
	1-5	Suitable tourism attractions around the Holy Shrine create new opportunities in tourism businesses.	
	1-6	Mashhad needs different attractions for pilgrims of diverse families and ages.	
	1-7	Mashhad needs an increase in open spaces to define different activities for families with all ranges of income.	
2	2-1	We need the minimum infrastructures in all types of tourism industry to attract tourists and to establish businesses.	Importance of tourism infrastructures
	2-2	It is impossible to perform some sorts of investments in Mashhad due to the poor urban infrastructures.	
	2-3	Special infrastructures must be in tourism.	
	2-4	Advanced transportation has a positive influence on exploitation of business opportunities.	
	2-5	Express trains play an important role in increasing travels and the number of pilgrims.	
	2-6	Lack of technological infrastructures impedes exploitation of business opportunities.	
	2-7	Tourism is highly dependent on various infrastructures including advanced urban and suburban transport.	
	2-8	We need various infrastructures including legal, transportation, new technologies, etc...to boom businesses in tourism.	
	2-9	Areas and residential places for tourists should have the brand of most secure places.	
3	3-1	If the owners of new ideas are not supported, they will be disappointed to establish new businesses.	Legally supporting new ideas
	3-2	To make owners of ideas eager to establish new businesses, copyright and patent laws must be followed.	
	3-3	Legislations to support new ideas for exploitation of influential business opportunities.	
	3-4	Municipality of Mashhad must buy new ideas to boom the tourism in the city.	
4	4-1	If businesses offer new services and have special features, they help to increase exploitation of business opportunities.	Unique characteristics of tourism subsections
	4-2	Businesses known as special services such as free transport to the Holy Shrine for a particular hotel, or having a special	

		room with view to the Holy Shrine can play an important role to attract tourist.		
	4-3	Because each tourist environment has a special feature, thus particular identity of Mashhad must be reinforced and made suitable for the culture and intent of the travelers.	Particular identity of Mashhad	
	4-4	Hiking and medical tourism as well as pilgrimage have great potentials to attract tourist from other countries, because Shiites especially in Persian Gulf are very eager to visit Mashhad.	Medical tourism and hiking	
5	5-1	It is impossible for tourism to become a monopoly, since the pilgrims have various needs and pilgrimage has special features.	Impossibility to create monopoly	Impossibility to concentrate industry activities in a few large companies over the course of the year
	5-2	Because of the decrease in the number of pilgrims in low seasons, it is possible to create a monopoly by some large companies, particularly in some part of tourism industry such as accommodation and transportation.	Possibility to create monopoly in some times of the year	
	5-3	Astan Quds Razavi has an important role in city affairs.	Impossibility to establish large companies	
6	6-1	If the businesses are specialized, they can satisfy a wide range of pilgrims' needs.	Specialization of businesses	Segmenting the market
	6-2	Categorization of pilgrims' needs has a positive effect on exploitation of businesses.	Categorization of pilgrims' need	
	6-3	Specialized businesses should be established to offer special services.	Specializing the offered services	
7	7-1	The high amount of capital needed is an impediment for establishing businesses in tourism.	The high amount of capital to establish business in tourism	Use of capital
	7-2	Initial capital, especially in hospitality industry, is actually high and also very important.	High initial capital in hospitality industry	
	7-3	Starting a business in tourism industry requires high capital.	Starting a business need high capital	
8	8-1	It is important for the activity in tourism to be profitable.	Importance of profitability	Profitability of tourism industry
	8-2	Because the number of visitors to the city is high, the added value and return of capital us tourism businesses have a positive effect on exploitation of business opportunities.	Added value and return of capital	
9	9-1	The more businesses are prosperous the more new businesses can be established.	Effect of prosperous businesses on establishing new businesses	Market growth
	9-2	If the increase of active businesses leads to regional development, it can make businesses to boom and new businesses to be established.	Increase of active business can create new business	
10	10-1	Establishing research and development centers in businesses is very important.	Importance of intra-organizational research and development	The need for research and development

**Comparative study of qualitative analysis results with the literature:**

The following table shows the results of qualitative analysis of axial codes which are confirmed by literature of the study.

**Table 2-A:** Literature of the study confirming axial codes achieved from the results of qualitative analysis.

Axial codes achieved from interview	Literature of the study confirming axial codes achieved from interview with experts
Legally supporting new ideas, the need for research and development and creating new ideas outside the organization	(Schumpeter,1942), (Cooper & Bruno,1977), (Viant,1977), (Winter,1984), (Dean & Meyer,1992), (Malerba and Orsenigo,1996), (Udresh,2001), (Shane,2003) , etc...
Segmentation and growth of the market	(Schumpeter,1942), (Drucker,1985), (Dorfman,1987), (Cohen & Levin,1989), (Christensen & Bower,1996), (Borja and Castells, 1996),(Kirzner,1997), (Grosky,2001), (Hansen, 2001), (Klepper & Sleeper, 2001), (Shane,2003), (Sue & Shen,2004), etc...
Use of advertising	(Girfalco,1991), (Grosky,1995), (Ducey,1988), (Aldrich,1999), (Malerba & Orsenigo,2000), (Marman & tashman,2001), (Shane,2003), (Krenz,2009), etc...
Appropriability	(Levin et al., 1987), (Levin & Cohen, 1989), (Teece & Pisano,1994), (Anton & Yao, 1995), (Shane,2003), etc...
Impossibility to concentrate in a few large companies, use of capital and profitability of industry	(Dorfman,1987), (Ramanli,1989), (Helmastrem,1989), (Gompers & Lerner,1999), (Shane,2003), etc...
Attractiveness of tourism environment	(Bruno & Tyebjee,1982), (Banks,1991), (Mill & Morrison,1992), (Ritchie & Crouch,1993), (Rinold, Miller & Mackey, 1993), (Buhalis,2000), (Lerner & Huber,2000), (Vangsai & University, 2003), etc...
Importance of infrastructures related to tourism	{Frizhen,2984), (Lee & Madison, 1996), (Hall,1996), (Anderson, 1996), (Australia Tourism and Transport Forum,2010), (Taghavi & Gholipour, 2009), etc...
Unique characteristics of tourism subsections	(Cohen, 1979), (Kevin & Slevin, 1989), (landsber, Krishnamurti & Stavenga, 1995), (O'reily, 1997), Page, Forer & Laton, 1999), (Reichel, Lowengart & Milman, 2000), (Reichel & Huber, 2005), etc...