

Presenting Business Model of Health Tourism Holdings in Iran

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Abstract

Today using internet and business of this technology by companies has turned to a factor for gaining competitive advantage in businesses. Hence, the research was conducted in order to present a model for electronic business of health tourist holdings in Iran. Current research is an applied one which was conducted on 2015-2016. Statistical society of the research is Iran's hospitals. Tools for gathering data was questionnaire for determining reliability of questionnaire using Cronbach alpha coefficient and validity was more than 0/7. Therefore, credibility of the questionnaire can be approved. In order to analyze data descriptive and inferential statistics were used and in order to analyze data, SPSS version 18 and Lisrel version 8 were applied. Research findings indicated that health tourism in Iran is in an appropriate condition. Also holdings in Iran are in an appropriate condition. Hence, regression equation along with forecasting variable of economic control, provision chain integration, and innovation significantly have an effect on selection of electronic business model in health tourism holdings. But operational integrity and resourcing did not have an effect on selection of electronic business model in health tourism holdings.

Key word: Economical control, operational integrity, Integration in supply chain, Innovation

Introduction

Appearance of technology led to acceleration of communication and integration of companies and establishment of value networks so that this way they can reduce exchange and coordination fees substantially. As far as it was observed some companies joined their competitors in order to raise business efficiency and to establish value added in their clients. With the aim of having access to communication technology with big size and low price and designing business design for managers. The reduction led to increasing fading of industrial borders and concept of business model was analyzed by industry as a unit (Osterwalde, 2005). On the other hand, according to change is an inseparable part of new business, many of scientific resources related to strategic management and business development focus on achieving a stable competitive merit, becoming united with changes such as technology changes, change of rules and regulations and market in order to survive. In modern competitive world only companies are able to survive which can choose more appropriate business model compared to model of competitor according to continuous assessment of market demands and technology necessities (Evans, 2000). In order to meet various needs of clients (organizational and consumers), it is necessary to specify position of company and to design business model compared to other network companies, value chain and income distribution method among all network companions and value chain. In fact, expressing business, processes and its systems and start of complexities and problems are indicate business model (Coopers, 2002)

How to Work

Current research is an applied one which was conducted in 2015-6. Statistical society of the current research is Iran`s hospitals.

Tools for gathering data were questionnaires which showed level of compatibility of questionnaire with goals in order to measure content credit of research. After designing primary model based on research background, dimensions, criteria the questionnaire was sent for 20 professors and faculty members. Gaining their opinions, necessary modifications were done in questioned. Next, after suggestions of experts, with definite idea and coordination with supervisors and advisors, final questionnaire was designed and statistical sample were provided with it. On the other hand, credibility of structure was tested by confirmatory factorial analysis test which approved test results and structure credibility. In order to specify reliability level of questionnaire of the current research, before complete distributing it 30 questionnaires were distributed among statistical sample and credit level was more than 0/7 which is acceptable. In order to specify sample size, in the current research total country was divided into five areas (north, south, center, east and west) which in form of multistep random clustering sampling totally (10 times 20) 200 statistical society were selected based as a sample and share of each district was 40. In order to analyze data, descriptive statistic (frequency, average, standard deviation) and inferential statistic were used for reviewing condition. Single sample t-test was used for reviewing condition. Regression test was applied for reviewing effect of criteria and structural equation model was used for presenting model. SPSS version 18 and Lisrel version 8 were applied for data analysis.

Research Findings

Describing research variables:

Table 1-descriptive statistics for variables in hospitals selected in medical science university of Iran

Standard deviation	Variance	Mean	Max	Min	Number	Item statistic and variable
0.214	0.046	3.68	5	3	200	Economic control
0.215	0.047	3.72	4	3	200	Operational integrity

0.251	0.063	3.59	4	3	200	Integrity in provision chain
0.334	0.112	4.10	5	3	200	Innovation
0.574	0.330	3.74	5	3	200	Resource finding
0.862	0.743	3.29	5	1	200	Health tourism

Table 1 shows minimum value, max, mean, variance and standard deviation of the research variables. According to the table, maximum mean is for innovation (4.1) and minimum one is for health tourism (3.29).

Research Hypotheses

The first hypothesis: current condition of health tourism in Iran is appropriate: single sample t test was used for reviewing this/

Table 2: results of single sample t test for the first research hypothesis

Confidence distance of 95 percent		Mean difference	Significance level	Freedom level	T	Variable
High level	Low level	3.29	0.000	199	54.033	Health tourism
3.41	3.17					

Based on Table 2 and according to significant level (0.000) which is less than 0.05, T value gained was 54.033 and since this value is more than critical value $+1.96$. As a result, zero hypothesis is rejected and hypothesis one is accepted. Average responses presented by statistical sample for health tourism are based on Likert 3.29 scale from 5. If the average is extended to society, average responses will be placed in 3.17 to 3.41. Since max level of domain (3.41) is more than 3, we can argue that health tourism in Iran is in an appropriate condition.

The second hypothesis: current condition of holding in Iran is appropriate.

Table 3- results of single sample T-test for the second hypothesis

95-percent confidence distance		Mean difference	Significance level	Freedom level	T	Variable
High level	Low level	3.77	0.000	199	37.930	Holdings
3.79	3.74					

Based on table 3 and according to significance level (0.000) which is less than 0.05, t value is 37.930 and since this is more than critical value of ± 1.96 , hypothesis zero is rejected and hypothesis one is accepted. Average responses presented by statistical sample for holdings 5 out of 3.77 based on Likert scale. If the mean is extended to society, mean responses are located in 3.74 to 3.79. Since high level of the area (3.79) is more than 3, we may argue that holdings in Iran are in a fine condition.

The third hypothesis: indicators of economic control have an effect in choosing electronic business model in health tourism holdings.

Table 4, results of variance analysis for the third hypothesis

Significance level	F	Average squares	Freedom level	Total squares	Model
000/0	510/32	861/20 642/0	1 198 199	861/20 052/127 913/147	Total regression left

Table 5, results of coefficients of test for the third hypothesis

Significance level	T	Standardized coefficients	Non-standardized coefficient		Model
		Beta	Standard error	B	
021/0 000/0	328/2- 702/5	944/0	979/0 265/0	279/2- 512/1	Stable level of economic control

Based on results of table Anova and value for possibility value and also statistic f with freedom level of (1.99) for the model and the value gained for sig level in confidence level of 95% which is less than sig level of 0/05, we can observe that the third hypothesis of the research is approved. Therefore, regression equation along with variable of economic control variable significantly has an effect on choosing electronic business model in health tourism holdings.

The forth hypothesis: indicators of operational integrity have an effect on choosing electronic business model in hath tourism holdings.

Table6, results of test variance analysis for the forth hypothesis

Significance level	F	Average squares	Freedom level	Total squares	Model
000/0	981/1	465/1 740/0	1 198 199	465/1 448/146 913/147	Total regression left

Table 7, results of test coefficients for the forth hypothesis

Significance level	T	Standardized coefficients	Non-standardized coefficient		Model
		Beta	Standard error	B	
087/0 161/0	721/1 407/1	100/0	504/1 397/0	814/1 397/0	Stable level of operational integrity

Based on results of table Anova and value for possibility value and also statistic f with freedom level of (1.99) for the model and the value gained for sig level in confidence level of 95% which is more than sig level of 0/05, we can observe that the forth hypothesis of the research is rejected.

The fifth hypothesis: indicators of integrity in provision chain have an effect on choosing electronic business model in health tourism holdings.

Table 8, results of test variance analysis for the firth hypothesis

Significance level	F	Average squares	Freedom level	Total squares	Model
040/0	090/3	273/2 736/0	1 198 199	273/2 640/145 913/147	Total regression left

Table 9, results of test coefficients for the fifth hypothesis

Significance level	T	Standardized coefficients	Non-standardized coefficient		Model
		Beta	Standard error	B	
000/0 040/0	536/5 758/1-	124/0-	871/0 242/0-	821/4 425/0-	Stable level of integrity in provision chain

Based on results of table Anova and value for possibility value and also statistic f with freedom level of (1.99) for the model and the value gained for sig level in confidence level of 95% which is less than sig level of 0/05, we can observe that the third hypothesis of the research is approved.

Therefore, regression equation along with variable of economic control variable significantly has an effect on choosing electronic business model in health tourism holdings.

The sixth hypothesis: indicators of innovation in provision chain have an effect on choosing electronic business model in health tourism holdings. To review the effect, regression test was used. Table 14-4 shows results of the test.

Table 10, results of test coefficients for the sixth hypothesis

Significance level	F	Average squares	Freedom level	Total squares	Model
001/0	711/2	998/1 737/0	1 198 199	998/1 915/145 913/147	Total regression left

Table 11, results of test coefficient for the sixth hypothesis

Significance level	T	Standardized coefficients	Non-standardized coefficient		Model
		Beta	Standard error	B	
000/0 001/0	029/6 647/1-	116/0-	751/0 182/0	526/4 300/0-	Stable level of innovation

Based on results of table Anova and value for possibility value and also statistic f with freedom level of (1.99) for the model and the value gained for sig level in confidence level of 95% which is less than sig level of 0/05, we can observe that the sixth hypothesis of the research is approved.

Therefore, regression equation along with variable of innovation predictor significantly has an effect on choosing electronic business model in health tourism holdings.

The seventh hypothesis: indicators of resource have an effect on selecting electronic business model in health tourism holdings. To review the effect, regression test was used. Table 16-4 shows results of the test.

Table 12, results of test variance analysis for the forth hypothesis

Significance level	F	Average squares	Freedom level	Total squares	Model
903/0	015/0	011/0 747/0	1 198	011/0 902/147	Total regression

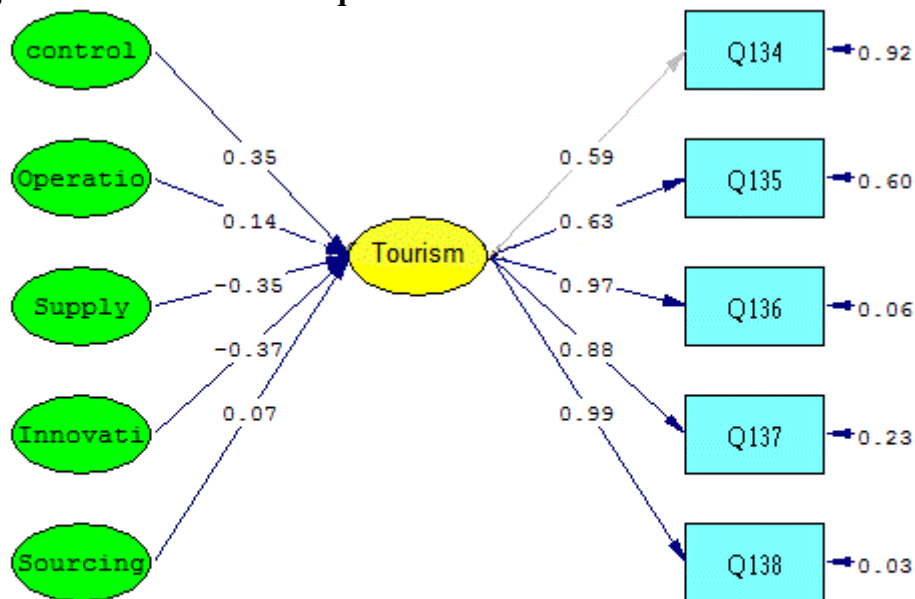
		199	913/147	left
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Table 13, results of test coefficients for the forth hypothesis

Significance level	T	Standardized coefficients	Non-standardized coefficient		Model
		Beta	Standard error	B	
000/0 903/0	265/8 122/1-	009/0-	404/0 107/0	343/3 013/0-	Stable level of resource finding

Based on results of table Anova and value for possibility value and also statistic f with freedom level of (1.99) for the model and the value gained for sig level in confidence level of 95% which is more than sig level of 0/05, we can observe that the seventh hypothesis of the research is rejected.

Modeling of research structural equations



Chi-Square=6891.63, df= 5135, P-value=0.00000, RMSEA=0.050

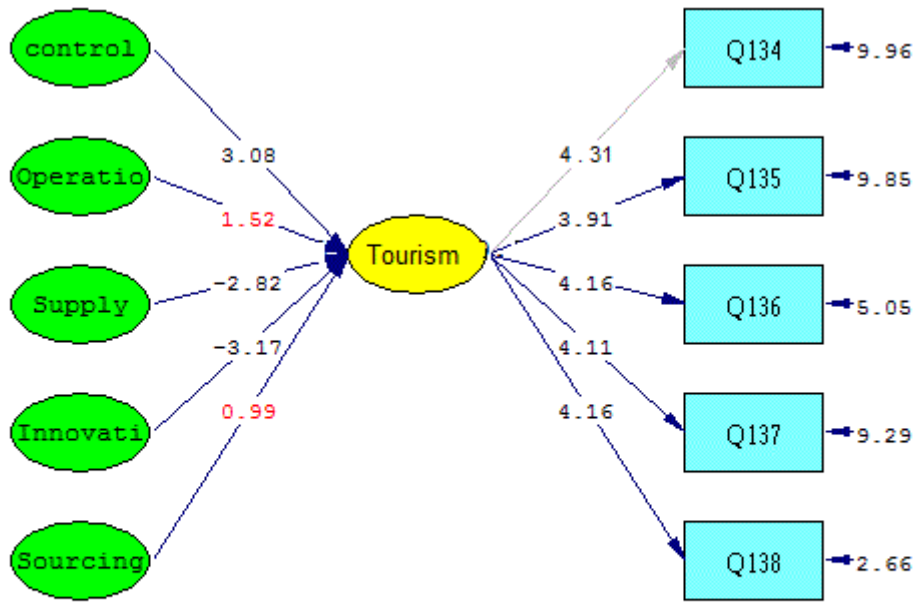
Figure 1, standard factorial loads of research model

According to output of Lisrel software, values for fitness indication were appropriate and numbers and factorial load were more than 0/3 except for two cases which is acceptable. Figure above shows that these dimensions related to independent variables and dependent ones appropriately cover the variables and are valid.

Table 14, fitness indicators of research model

Increasing fitness index	Comparative fitness index	Softening fitness index	Extended index for goodness	Goodness index	Root of square mean error	Second root of mean squares for standardized leftovers	K square/ freedom level	Freedom level	K square	Fitness indicator
34/0	94/0	93/0	99/0	93/0	050/0	04/0	3/1	5135	63/6891	Model

Results of table 14 show that research model is in an appropriate condition in terms of fitness indicators. Models were compared based on fitness indicators where k^2 indicator is $1/3$ where acceptance domain was between 1-5 which is valid and approves model fitness. The second root for mean squares of standard leftovers is acceptable according to 4. Next indicator of root for mean error is 0/050 which is acceptable. Goodness indicator is 0/93 which is valid. Extended indicator of goodness whose values are between 0/ to 0/95 are acceptable. In the final model 0/95 is acceptable. Comparative fitness indicator in the model is 0/99 which is similar to softened indicator which is great. Finally, goodness indicator whose acceptance domain is between 0-1 is great which is 0/34. Therefore, according to total indicators and fitness indicators calculated we can argue that fitness indicators have appropriate fitness for the research model.



Chi-Square=6891.63, df=5135, P-value=0.00000, RMSEA=0.050

Figure 2, factorial loads of T value of the research model

According to t test, all the values for t statistic observed in the model were more than 1/96 and were accepted but they are less than 1/96 in the two cases which are in red. According to above model and correlation value of the first, third and forth hypotheses the research is approved and second and fifth ones were rejected (t=11/62)

Table 15, results of standard coefficients and correlation statistics

Rankin gs	T values	Route coefficients	Relation	Dependent	Independent
2	08/3	35/0	Direct	Health tourism	Economic control
-	52/1	14/0	-	Health tourism	Operational integrity
3	82/2-	35/0-	Indirect	Health tourism	Provision chain integrity

1	17/3-	37/0-	Indirect	Health tourism	Innovation
-	99/0	0.07	-	Health tourism	Resource finding

Above table shows that three relations and research hypothesis are approved and also according to ranking t values, effect of independent variables on dependent variable is innovation, economic control and integration of provision chain, respectively.

Discussion and conclusion

Successful handling of electronic business model in health tourism holdings need a very accurate analysis regarding effectiveness of the system on activities and processes of Iranian hospitals. According to research findings, health tourism in Iran is in an appropriate condition. Also holdings in Iran are in a good condition. Therefore, regression equation along with predictor variable of economic control. Provision chain integrity and innovation significantly have an effect on choosing electronic business model in health tourism holdings. But operational integrity and resource findings have no effect.

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