PRESENTING A MODEL FORINNOVATION EXCELLENCE IN THEISLAMIC REPUBLIC OF IRANTV

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Abstract: This research aimed to present a model for innovation excellence in the Islamic Republic of Iran TV. The study was performed using method of descriptive survey and path analysis.117 employees of Islamic Republic of Iran TV participated in the study. Participants filled informational technology, innovation leadership, learning capability, knowledge absorptive capacity and innovation Questionnaires. In order to analyze data used path analysis with LISREL software. The result revealed that informational technology exerted a direct, significant influence upon innovation leadership, learning capability, knowledge absorptive capacity. In addition, informational technology exerted an indirect one upon innovation through the mediation of innovation leadership, learning capability, knowledge absorptive capacity. Innovation leadership exerted a direct, significant influence upon learning capability, knowledge absorptive capacity. Innovation leadership exerted an indirect one upon innovation through the mediation of learning capability, knowledge absorptive capacity. Learning capability exerted a direct, significant influence upon knowledge absorptive capacity and innovation. Knowledge absorptive capacity exerted a direct, significant influence upon innovation. In general; this study emphasized the influences of informational technology, innovation leadership, learning capability, knowledge absorptive capacity on innovation.

Keywords: Innovation excellence, informational technology, innovation leadership, learning capability, knowledge absorptive capacity.

INTRODUCTION

Historical trend of change in effective factors on national development of countries shows that simple labor force, raw materials and consumption markets were replaced with sciences and technology and as the data conversion to data, information to knowledge and knowledge to technology is changed rapidly, innovation is of great importance for survival of companies and countries and this is verified by empirical investigations (Ghazinuri and Ghazinuri, 2008, 65).

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In current business competitive environment, anything is changed but the only fixed thing is the phenomenon of changes. Rapid changes of technology in various industries and short life cycle of products and services and intense competition are the most important factors on increasing significance of innovation in organizations (*et al.*, 2003; 792). With high innovation and creating and developing new capabilities allowing them to achieve better performance, organizations are successful in responding the variable environments (*et al.*, 2004, p. 169). Today, innovation is considered as the most important factor of sustainable competition of organization (Chen *et al.*, 2015, 3).

Thus, most authors consider innovation as the basis of current competitive economy (2003, 114). Most innovation experts believe that only the organizations putting innovation on priority can create competitive advantage and lead to their long-term life (Skalen *et al.*, 2014, 4). Islamic Republic of Iran TV is not an exception and for survival, it needs innovation like other organizations. This requires identification of features turning it to an innovative organization. In addition, the impact of technology and wide application of satellites, internet, etc. has doubled the importance of this issue. Thus, it is required that Islamic Republic of Iran TV, put innovation on priority and due to the significance of innovation for Islamic Republic of IranTV, identification of effective factors can be of great importance. A question here is raised that what is the appropriate model for excellence of innovation in Islamic Republic of IranTV. This question is of great importance for organizational experts to attempt to respond it. Thus, the present study aimed to present an appropriate model for innovation excellence in Islamic Republic of IranTV and testing it. Thus, based on theoretical and empirical basics, a model composed of IT, innovation leadership, learning capability, and innovation is presented. Later, we explain the model components.

REVIEW OF LITERATURE

Information Technology (IT)

Increasing growth of IT has created a revolution in various dimension of human life and performance of organizations. This technology has changed the function methods and attitude of people, organizations and governments and created new industries, new jobs and creativity in affairs (Bagherzade, 2009: 39). Based on rapid growth of new ICT in society and in organizations, in recent decades, new technologies are associated with all urban life aspects. Any individual and organization gives much importance to skill, literacy in new ICT and development of technologies in organization and facilitation of works and all organizations are interested to bring the new technologies into the organization (Kutlu and

Ozturan, 2008, 25). IT plays important role in innovation. Technology alone and as abstract can not makes changes but when it is applied for innovative idea sharing, its test application, in innovative ideas, it can play important role in innovation (Hemlin *et al.*, 2014, 179). IT can play important role in formation of new ideas , creativity and innovation in organization (Bodaghi, 2008, 4). Today, technology is a tool for collection, dissemination, registration and facilitator of using innovative ideas. IT as a strong tool can play important role in innovation leadership and it is one of the innovative tools in using innovation (Hemlin *et al.*, 2014, 180, *et al.*, 2014, 457).

INNOVATION LEADERSHIP

Avey *et al.*, (2008, 429) state that innovation leadership gives power to organization members and they can have the opportunity for being independent and testing new ideas. In addition, innovation leadership by mental stimulation of thoughts can challenge the imagination of employees and propagate innovation and creativity among them (García-Morales *et al.*, 2008, 302). In addition, Gong *et al.*, (2009, 766) believe that innovation leadership encourages innovative behaviors in organization and this type of leadership by creating common goals can allow the leaders to motivate organization members to search new work process and methods. Leadership is one of the main factors in guiding organization to absorb knowledge and learning capabilities. Leadership plays important role to create motivation and guidance of organization to absorb domestic and international knowledge and improve learning capabilities (Hoon Song *et al.*, 2012, 99). In many researches, innovation leadership provides creative climate by processes as questioning current processes, stimulating followers to challenge the previous fundamental assumption and presenting new work processes and innovation and they direct organizational innovation (Aarons and Sommerfeld, 2012, 424).

LEARNING CAPABILITIES

Learning capabilities refer to individual and organizational abilities and capacities to detect the need to change and adapt and performing learning purposeful activities (Jacobs and coghlan, 2005, 117). Learning capabilities play important role in improving competitive capabilities as individual and organizational learning capacity, recognition of competitors can provide competitive environment and competitive requirements and these capabilities can lead to their success in services. The higher the individual and organizational learning capabilities, the better the organization in using marketing capabilities and skills and competition with competitors (Sanzo *et al.*, 2012, 705).

KNOWLEDGE ABSORPTIVE CAPACITY

Knowledge absorptive capacity is composed of creating processes and trends in which the organization absorbs, simulates, internalizes and acquires knowledge to create dynamic capabilities. Indeed, absorption capacity is the phenomenon in which people by simultaneous learning can increase their capability in absorbing information (Lundvall, 1992, 127).

Cohen and Levinthal (1990, 130) defined absorptive capacity as: The ability of enterprise in determining value of new external information and absorbing them and application for commercial goals. Zahra and George (2002, 186) defined absorptive capacity as a set of routine process by which the enterprise can acquire, absorb, change and operate to create dynamic organizational capability. These four dimensions enable the enterprise to form the resources and adapt it with changing market conditions and achieve competitive advantage.

The empirical review of literature shows that no study has been conducted to present a model for innovation excellence in Islamic Republic of Iran TV. The present study attempts to present a model for innovation excellence in Islamic Republic of Iran TV and identifies the effective variables on innovation of Islamic Republic of Iran TV.

CONCEPTUAL MODEL OF STUDY

Based on the theoretical and research review of literature, the conceptual model is shown in Figure 1. Based on theoretical and research literature, all researchers and theorists were common in some variables as IT, innovation leadership, learning capabilities and knowledge absorptive capacity. Figure 1 shows the relationship between study variables. Based on the relationship between variables, the present study hypotheses are as follows:

H1: IT is effective on innovation leadership.

H2: IT is effective on learning capability.

H3: IT is effective on knowledge absorptive capacity.

H4: Innovation leadership is effective on learning capability.

H5: Innovation leadership is effective on knowledge absorptive capacity.

H6: Learning capability is effective on knowledge absorptive capacity.

H7: Learning capability is effective on innovation.

H8: knowledge absorptive capacity is effective on innovation.
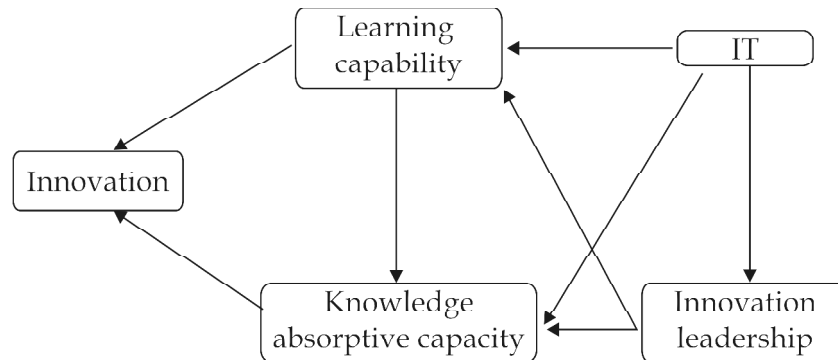
Figure 1: Conceptual model of study

METHOD

The study is descriptive (non-experimental) and study design is correlation-path analysis. As in this study, the relationship between variables is investigated in the form of causal model.

STUDY SAMPLE AND POPULATION

The study population of present study is employees of Islamic Republic of Iran TV as 171 are selected as randomly.

DATA COLLECTION MEASURE

In the present study, questionnaires of IT, innovation leadership, learning capability, knowledge absorption capacity and innovation are used to measure variables. To investigate validity and reliability of variables, confirmatory analysis and Cronbach's alpha are used. Confirmatory factor analysis is a theory test model in which the researcher starts his analysis by a previous hypothesis. This model is based on strong theoretical and empirical foundation; it shows which variables are correlated with factors and which factors with which factors. To evaluate construct validity, a reliable method is presented to the researcher by which, they can test the hypotheses about factor structure of data arising from a pre-determined model with definite number of factors. After defining pre-empirical factors, confirmatory method determines fitting of pre-defined factor model, optimal adaptation of observed and theoretical factor structures are tested for data set. In this study, to evaluate confirmatory factor analysis, χ^2/df, RMSEA, GFI and AGFI are used. χ^2/df has no a constant criterion for an acceptable model but small value of χ^2/df is regarding bitter fitting of model (Homan, 2008).

Browni and Kadek have recommended using root mean square error approximate (RMSEA) as presented by Stiger (1990) as difference size for each degree of freedom. RMSEA index for good models is equal to 0.05 or lower. The higher values to 0.05 show reasonable error for approximation. The models their RMSEA is 0.10 or above, have weak fitting. Jarzkag and Surbom (1989) in Lisrelpresented goodness of fit (GFI) and adjusted goodness of fit (AGF) and showed that the model had better fit compared to the lack of fit. Based on contract, GFI, AGFI should be equal or bigger than 0.90 that the model is supported (Human, 2008, 235-245).

IT

Liu *et al.,* (2013) questionnaire is used to measure IT. This questionnaire is composed of 8 items. The questions are scored based on five-item Likert scale of totally disagree (1) to totally agree (5). The internal consistency coefficient with Cronbach's alpha is 0.92. The indices of confirmatory factor analysis GFI = 0.95, RMSEA = 0.049, AGFI = 0.92 show the good fit of model with data.

Innovation Leadership

To measure innovation leadership, researcher-built questionnaire is used. This questionnaire has 16 questions. The questions are measured based on 5-item Likert scale of totally disagree (1) to totally agree (5). The internal consistency coefficient with Cronbach's alpha is 0.87. The indices of confirmatory factor analysis GFI = 0.96, RMSEA = 0.043, AGFI = 0.94 show the good fit of model with data.

Learning Capability

To measure Learning capability, questionnaire ofCHiva *et al.,*(2005) is used. This questionnaire has 14 questions. The questions are measured based on 5-item Likert scale of totally disagree (1) to totally agree (5). The internal consistency coefficient with Cronbach's alpha is 0.89. The indices of confirmatory factor analysis GFI = 0.93, RMSEA = 0.052, AGFI = 0.90 show the good fit of model with data.

Knowledge Absorptive Capacity

To measure Knowledge absorptive capacity, questionnaire of Liu *et al.,* (2013) is used. This questionnaire has 12 questions. The questions are measured based on 5-item Likert scale of totally disagree (1) to totally agree (5). The internal consistency coefficient with Cronbach's alpha is 0.85. The indices of confirmatory factor analysis GFI = 0.94, RMSEA = 0.053, AGFI = 0.92 show the good fit of model with data.

Innovation

To measure Innovation, questionnaire of Darvich and Jardin (2002) is used. This questionnaire has 11 questions. The questions are measured based on 5-item Likert scale of totally disagree (1) to totally agree (5). The internal consistency coefficient with Cronbach's alpha is 0.94. The indices of confirmatory factor analysis GFI = 0.97, RMSEA = 0.033, AGFI = 0.95 show the good fit of model with data.

DATA ANALYSIS METHOD

After calculation of descriptive indices of study variables, to evaluate the causal relationship between variables, path analysis is used. Path analysis was developed for the first time by sevil write (1934). Multi-variate regression was regarding causal models. The aim was achieving quantitative estimations of causal relations between a set of variables (Homan, 2008). For data analysis, SPSS, LISREL software is used.

RESULTS

As the analysis of causal models is correlation matrix, correlation matrix, mean and standard deviation of studied variables are shown in Table 1.

As shown in Table, IT correlation coefficient with innovation leadership ($r = 0.35$), learning capability ($r = 0.61$), absorptive capacity ($r = 0.47$) and innovation ($r = 0.48$) is positive and significant at level ($P < 0.01$). Correlation coefficient of innovation leadership with learning capability ($r = 0.62$), absorptive capacity ($r = 0.39$) and innovation ($r = 0.45$) is positive and significant at level ($P < 0.01$). The correlation coefficient of learning capability with absorptive capacity ($r = 0.50$) and innovation ($r = 0.47$) is positive and significant at the level

Table 1
Mean, standard deviation and correlation matrix of study variables

Innovation	Knowledge absorptive capacity	Learning capability	Innovation leadership	IT	SD	Mean	Variables
				1	0.82	3.38	IT
			1	**0.35	0.62	3.28	Innovation leadership
		1	**0.62	**0.61	0.69	3.29	Learning capacity
	1	**0.50	**0.39	**0.47	0.62	3.25	Knowledge absorptive capacity
1	**0.44	**0.47	**0.45	**0.48	0.66	3.92	Innovation

**P < 0.01
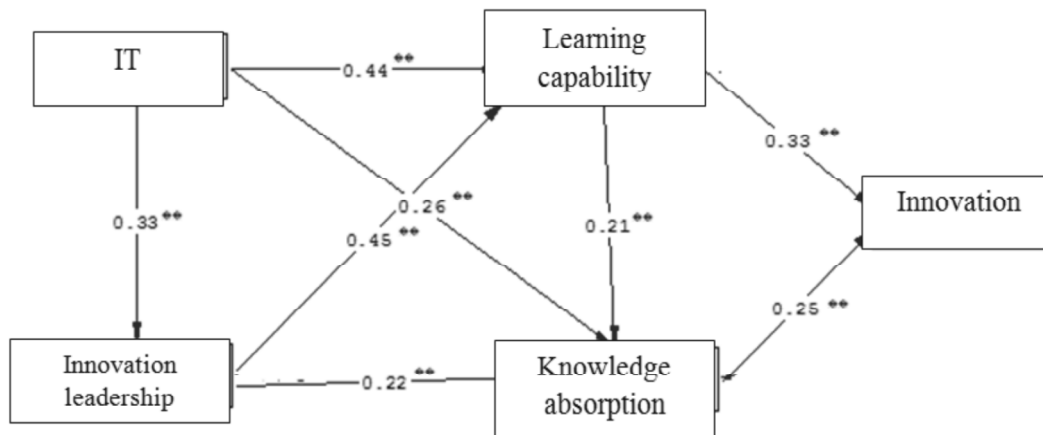
Chi-Square=10.31, df=6, P-value=0.00000, RMSEA=0.065

Figure 2: Fitted model of innovation excellence in Islamic Republic of Iran TV

(P < 0.01). Correlation coefficient of absorptive capacity and innovation (*r* = 0.44) is positive and significant at level (P < 0.01). Figure 2 shows fitted model of innovation excellence in Islamic Republic of Iran TV. Values on paths show standard parameters. As shown in Figure 2, all paths are significant.

In the present study, the moderating role of learning capability and knowledge absorptive capacity among IT, innovation leadership and innovation by path analysis can be investigated. Table 2 shows that coefficients of direct, indirect, total, explained variance and significance level among the study variables are shown. The values inside parenthesis are t coefficients.

Table 2
Estimation of standardized coefficients of direct, indirect effect, total and explained variance of model

Explained variance	Total effect	Indirect effect	Direct effect	Path
0.25	0.25**(4.58)	–	0.25**(4.58)	On innovation from Knowledge absorptive capacity
	0.38**(7.11)	0.05**(2.61)	0.33**(5.88)	Learning capability
	0.23**(7.60)	0.23**(7.60)	–	Innovation leadership
	0.31**(8.31)	0.31**(8.31)	–	IT
0.32	0.21**(3.18)	–	0.21**(3.18)	On Knowledge absorptive capacity
	0.31**(6.37)	0.09**(3.05)	0.22**(3.87)	from Learning capability
	0.46**(9.32)	0.20**(5.16)	0.26**(4.67)	Innovation leadership IT
0.52	0.45**(10.94)	–	0.45**(10.94)	On Learning capability from
	0.59**(13)	0.15**(5.44)	0.44**(10.76)	Innovation leadership IT
0.11	0.33**(6.28)		0.33**(6.28)	On Innovation leadership from IT

**P < 0.01

As shown in Table 2, direct effect of knowledge absorptive capacity (β = 0.25) and learning capability (β = 0.33) on innovation is positive and significant at the level (P < 0.01). The direct effect of learning capability (β = 0.21), innovation leadership (β = 0.22) and IT (β = 0.26) on knowledge absorptive capacity is positive and significant at the level (P < 0.44). Direct effect of innovation leadership (β = 0.45) and IT (β = 0.44) on learning capability is positive and significant at the level (P < 0.01). Direct effect of IT on innovation leadership (β = 0.33) is positive and significant at the level (P < 0.01). Also, indirect effect of IT and innovation leadership on innovation is positive and significant. As shown in Table 3, 25% of innovation variance, 32% of knowledge absorptive capacity, 52% of learning capability and 11% of innovation leadership are explained by study model.

The fit features of path analysis model are shown in Table 3.

Table 3
Features of fit of tested model

NFI	CFI	AGFI	GFI	RMSEA	$/df\chi^2$
1.72	0.065	0.96	0.92	0.98	0.97

As shown in Table 3, chi-square to degree of freedom (χ^2/df = 1.72) and goodness of fit (GFI = 0.96), Adjusted goodness of fit (AGFI = 0.92) and RMSEA is 0.065 at good level. Thus, fit of prediction of excellence of innovation in Islamic Republic of Iran TV is at good level.

DISCUSSION AND CONCLUSION

The present study aimed to present an excellence model of innovation in Islamic Republic of Iran TV by path analysis. The results of path analysis showed that proposed model had relatively good fit with the data of study and could explain 25% of variance of innovation in Islamic Republic of Iran TV.The results of path analysis showed that IT had positive and significant effect on innovation leadership. This finding is consistent with the study of Eastman *et al.*, (2014, 465). This finding shows that IT can play important role in attitude and knowledge of leaders to support innovation and was effective on belief of leaders to give importance to innovation and its improving. Thus, IT as a strong tool can play important role in innovation leadership.

Another finding of path analysis shows that IT has positive and significant effect on learning capability. This finding is consistent with the results of study of Latchman *et al.* , (1999, 251), Robey, Boudreau and Rose (2000, 152) and Park *et al.*, (2015, 35). This finding shows that IT via a set of resources and using them

can increase knowledge and ability of company and acquire considerable technology foundations and using it in organization and can be effective on organizational learning capability. In addition, IT facilitates learning activities and transfer and using knowledge in organization. Also, Venkatraman (1989, 944) states that IT can lead to searching the root of problems and producing the best solutions for them and increasing organizational learning capability. The results showed that IT had positive and significant impact on knowledge absorptive capacity. This finding is consistent with the results of study of Liu *et al.*, (2013, 1459), Eastman *et al.*, (2014, 465), Jeon *et al.*, (2015) and Huang and Lucas (2015, 37). This finding shows that when organization emphasizes on using information systems, advanced technologies and technological innovations, the knowledge absorptive capacity is added the same. According to this finding, Tanriverdi (2005, 318) states that IT leads to understanding knowledge needs in organization, facilitating identification of resources and organization motivations for organizational knowledge. Thus, IT increases organization capacity in achieving knowledge from various resources, increasing availability of acquired knowledge from outside for all members of organization, transferring knowledge to the entire organization, documentation of knowledge from outside of organization and presented ideas, knowledge sharing and ideas from outside of organization and knowledge dissemination and new ideas in the entire organization.

Another finding of study shows that innovation leadership has positive and significant effect on learning capability. This finding is consistent with the results of study of Hoon Song *et al.*, (2012, 96). Based on this finding, we can say leadership *via* motivation, intellectual stimulation and self-confidence among organization members can provide energy for organizational learning and supports change processes and organizational learning. Innovation leadership with creating new learning opportunities via supportive conditions in organization and by inspiring the individual efforts of followers by increasing awareness of employees and activation of their higher level needs and motivating them to go beyond the personal interests for organization, learning capability is increased.

The results of path analysis show that innovation leadership has positive and significant effect on knowledge absorptive capacity. This finding is consistent with results of study of Flatten, Adams and Brettel (2015, 530) and Popaitoon and Siengthai (2014, 917). According to this finding, Hoon Song *et al.*, (2012, 98) stated that leadership was one of the main factors in guiding organization to knowledge absorption as leadership plays important role in creating motivation and guiding organization to absorb internal and external knowledge and improving learning capabilities.

Other results of study showed that learning capability had positive and significant effect on knowledge absorptive capacity. Based on this finding, we can say organizational learning capabilities via new and relevant knowledge, achieving skills and necessary capacities for competitive advantage, achieving new knowledge outside of organization, development of knowledge of company and sharing them can be effective on knowledge absorptive capacity. In addition, organizational learning creates the knowledge affecting the ability and motivation of employees to absorb much knowledge. The previous knowledge of learning processes can lead to improvement of capacity of knowledge absorption in organization (Cohen and Levinthal, 1990, 147).

The results of path analysis showed that learning capability had positive and significant effect on innovation. This finding is consistent with the results of study of Yu *et al.,* (2013, 2510) and Lyles (2014, 133). This finding shows that one of the processes of improving innovation is organizational learning capability providing required infrastructures for starting and performing innovation. Thus, organizations can use organizational learning principles to create organizational innovation. Not long time ago, the organizations were in a sustainable environment and prediction of future events was possible for them as the managers could manage and plan the organization under reliable conditions. Gradually, the changes of science and technology, economy, culture and politics affected the organizations rapidly. Thus, organizational leaders have found that they should view learning as a valuable phenomenon and develop the organization for success sin creating better future as learning continuously and they can lead to organizational innovation for their survival against changes. Thus, learning capabilities are effective on innovation via creating capabilities and development of knowledge and organizational power.

Other results of path analysis showed that knowledge absorptive capacity had positive and significant effect on innovation. This finding is consistent the results of study of Jeon *et al.,* (2015), Lau and Lo (2015, 111) and Kotabe, M., Jiang, C. X., and Murray (2014, 24). Via knowledge absorptive capacity, the organization absorbs, simulates, internalizes and acquires knowledge to create dynamic capabilities. Dynamic capabilities can lead to organization ability to create new manufacturing and service processes for rapid responding the environmental changes and this leads to innovation. Thus, via absorbing external knowledge and better form, knowledge absorptive capacity can crate and develop new capabilities and opportunities and be effective on innovation of Islamic Republic of Iran TV. Thus, there is no innovation without knowledge in organization. IN other words, innovation is not created alone and it needs conditions, grounds.

Totally, the results of the role of IT, innovation leadership, learning capabilities and knowledge absorptive capacity on innovation can be emphasized. The findings show that IT via achieving external knowledge and effect on knowledge and attitude of leaders on innovation leaders can be important. In addition, IT and innovation leadership via increasing the understanding of knowledge needs in organization, facilitation of identification of resources and motivations of organization for organizational knowledge and supporting employees to increase knowledge and its sharing on absorption capacity and learning capability can be effective. These variables are effective on organizational innovation. For innovation of grounds, some conditions are required as existing variables in the present study can provide these conditions uniformly and can lead to the increase of innovation in Islamic Republic of Iran TV. In this research, only a sample of employees of Islamic Republic of Iran TV was investigated. Thus, its generalization to other organizations and companies is limited. Also, the findings are based on self-report data. It is recommended that in further studies, qualitative and mixed methods are used to identify effective factors on innovation in Islamic Republic of Iran TV.

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