AENSI Journals

Advances in Environmental Biology

ISSN-1995-0756 EISSN-1998-1066

Journal home page: http://www.aensiweb.com/aeb.html

Individual and Organizational Factors Influencing Innovation of Manager: Evidence from Banks of Golestan Province

[1]**Farshid Elmi Mehr,** [2]**Parviz Saeidi**

[1]*Master's Degree of Governmental Management, Department of management, University college of Ferdows, Mashhad, Iran*
[2]*Department of management and Accounting, Aliabad Katoul Branch, Islamic Azad University, Aliabad Katoul, Iran*

ARTICLE INFO

Article history:
Article History
Received 25 March 2014
Received in revised form 20 April 2014
Accepted 15 May 2014
Available online 5 June 2014

Key words:
Entrepreneurship, Consultation, Consulting Networks, Analysis of Variance

ABSTRACT

The aim of this research is investigating Individual and organizational factors influencing innovation of bank's managers in Golestan province. This study is also a correlative study since it seeks to investigate the relation between dependent and independent factors during 2008-2009. In this study, the required data were collected by a questionnaire. Descriptive statistics and inferential statistics (simple and multiple linear regressions) were used in order to analyze the data. Results of the survey indicated that organizational factors were the most effective variable on innovation of managers. Furthermore, among them reward factor was the most important organizational factors. Individual factors were recognized as the second most effective variable on innovation of managers.

To Cite This Article: Farshid Elmi Mehr, Parviz Saeidi, Individual and organizational factors influencing innovation of manager: Evidence from banks of Golestan Province. ***Adv. Environ. Biol., 8(9),*** *261-266, 2014*

INTRODUCTION

The necessity of creativity in organizations is undeniable because many scholars believe that lack of creativity can destruct organization in long-term. Organization which has not creativity will be vanished. Thus, Organizations are constantly looking for ways to bring creativity in both terms of individual and organizational level in the organization. Because, Creativity can provides growth areas and changes in the organization. Innovation and creativity provide the most valuable wealth for organizations. Organizations and companies that want to succeed; its human resources encourage to innovation and creativity. Creativity may be the most important tool for managers. Without creativity, the firms become more predictable. Creative managers are seeking for new solutions to overcome problems. Creativity can lead to new and better solutions to business and customer problems. Thus, creativity may be the key to market success and improved operating efficiencies [8]. Johnson [9] argued that the key to successful innovation implementation rests on the convergence of three different factors. First, an innovation must be properly framed in terms of stakeholders' expectations. Secondly, a good internal innovation environment must be present. Finally, the pros of specific attributes of innovations must outweigh their cons. notably, the organization motivation toward innovation includes the absence of several elements that can undermine creativity: political problems and "trust battles" destructive criticism and competition whit in the organization, strict control by upper management and an excess of formal structures and procedures [2].

Innovation and Creativity:

Definition of innovation found in various literature, some are general and broad, while others focus on specific innovations like Masnan and *et al*., [10] who believed the implementation of an idea for a new product or service. In an organizational environment, examples of innovation are the implementation of ideas for restructuring, or saving of costs, improved communication, new technology for production processes, new organizational structure and new personnel plans or programs. Furthermore, innovation is regarded as something new which leads to change. It is also the intentional introduction and application within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, organization or wider society. Arad and *et al*., [3] focused on the nature of thought processes and intellectual activity used to generate new insights or solution to problems. Other definitions focus on the personal characteristics and intellectual abilities of individuals, and still others focus on the product with regard to the different qualities and outcomes of creative attempts

Corresponding Author: Farshid Elmi Mehr, Master's Degree of Governmental Management, Department of management, University college of Ferdows, Mashhad, Iran.

Individual Motivation to Innovate:

It is not easy to choose one dynamic to represent the effect that the individual has in the organization. Some authors emphasize individual resistance to management initiatives, the effects of training and of individual empowerment. To set the stage for construction of a framework for innovation in organizations, this paper uses the dynamic of motivation to represent the impact of the individual, in part because this concept addresses unconscious, conscious and proactive relationships to innovation. Perry and Porter [12] expressed four factors affecting for motivation in public organizations attract somewhat different types of individuals than do private organizations. The practical pay off from such a line of inquiry might be to increase the extent to which individuals entering government are satisfied with their organization and the extent to which their organization is able to secure effective behaviors from its members. 2. Measurability of individual performance. The performance of many public employees probably will be measured despite the lack of availability of generally accepted criteria, research on performance appraisal methods must appropriate for such circumstance also is needed. 3. Job security. Developing a better understanding of the motivational "costs" and "benefits" of current public job security practices must be concerned and designing alternative means for practicing political neutrality should be considerable.

Organizational Motivation to Innovate:

The orientation toward innovation must come primarily from the highest levels of management, however lower levels can also be important in communicating and interpreting that vision. On the basis of exiting information, it appears that the most important elements of the innovation orientation are: a value placed on creativity and innovation in general, an orientation toward risk (versus an orientation toward main ting the status quo [1].

Mohn Noor and Azli, Investigated tree independent variable include organizational commitment, self-monitoring and intrinsic motivation predict customer orientation. The criterion variable was the salespeople's customer-orientation behavior. The results indicate that organizational commitment and intrinsic motivation are significantly related to adoption of customer-orientation behavior exhibited by the salespeople. However, the results indicate that self-monitoring is not significantly related to customer-orientation behavior. The significant findings provide support for the notion that salespeople's customer-orientation behavior is related to that person's psychological predisposition to engage in customer-oriented selling. This leads to the conclusion that firms that want their salespeople to engage in customer oriented selling must be certain that their salespeople are committed to the organization and must be intrinsically motivated.

In opinion of Patterson [11] organizational requirements for innovation include: creativity, experimentation, internal communications and learning. It will be shown that the formation of close feedback loops between designers, developers and users can contribute significantly to the identification of new ideas and the discovery of new concerns from experimentation. As well as designers and developers, non-specialist actors such as users and intermediaries play an active role in providing knowledge to increase creativity by fitting products to their purposes and imparting significance.

Organizational Culture:

Organizational culture involves all organizational members, originates and develops at all hierarchical levels, and is founded on a broad-based history that is realized in the material aspects (or artefacts) of the organization (e.g. its name, products, buildings, logos and other symbols, including its top managers). Thus, the concept of organizational culture includes material aspects central to the marketing-based concept of corporate identity. However, while studies of corporate identity focus on how these material aspects express the key idea of the organization to external constituencies, studies of organizational culture address how they are realized and interpreted by organizational members.

Organizational Structure:

Economists have studied the rate of innovation in business firms, but their concern is the structural characteristics of markets that promote innovation rather than with structural characteristics of firms that promote innovation. Moreover, their success in isolating the structural determinants of innovation is not great, for it is still uncertain which type of market structure (competitive, oligopolistic or monopolistic) is the most conductive to innovation [15].

Reward and Innovation:

Reinganaum, investigated whether or not entry results in increased or decreased investment by a given firm can depend critically upon the extent to which the rewards to innovation are appropriable. Similarly, when rewards are suIticiently appropriable, firms will overinvest relative to the cooperative optimum; on the other hand, when rewards are sufficiently inappropriable, firms will under invest relative to that benchmark.

Research on creativity and its constituent elements has begun over one century but the basic motivation for further study was conducted by Guilford in 1950. He believes, creativity is a set of capabilities and features lead to creative thinking. He considered synonymous creativity with divergent thinking (to find new approaches to solving problems) in contrast, convergent thinking (to obtain the correct answer).

Creativity:

Although many definitions of creativity is declared but in sum up 3 perspectives of creativity can be mentioned:

Psychological perspectives: In this view creativity is defined as fusion of new ideas by intuitionism from unknown sources and it is one of the main aspects thought or thinking. Moreover, thinking is Rearrangement or changing data and acquired symbols in the existing long-term memory and it is two kinds:

Convergent thinking that the rearrangement process or re-building information and symbols have been in long-term memory Divergent thinking about the process of combining and redecoration data and symbols is obtained in long-term memory. Thus, creativity is divergent thinking. This definition is based on there is a direct contact between creativity and imagination or visualization capabilities (Image formation process of perception in the mind and its continuation after the occultation phenomena) briefly; it means the process of creation thinking and new ideas.

Social perspective: In this view the process of finding creative new ways to do things better or the ability to offer new solutions to solve problems, it means offer new ideas and plans for new products and service.

Organizational perspective: It is described as creative thinking and initiative to provide new designs to improve the quantity or quality of activities For example, increased productivity, increased production or services reduce costs, improve productivity or service delivery methods, new products or services and etc.)

These days, different organizations play an important role in human needs and it represents much of social life and individual and organizational life of the person. Thus, infrastructure needs of the most creative and successful organizations will be organized and it is essential for creative directors in the presence of higher levels of organization.

Results of Sunder and Menon, suggest that the presence of both individual and organizational creativity mechanisms led to the highest level of innovation performance. The results also suggest that high levels of organizational creativity mechanisms (even in the presence of low levels of individual creativity) led to significantly superior innovation performance than low levels of organizational and individual creativity mechanisms. The paper also presents managerial and academic implications. This study suggests that it is not enough for organizations to hire creative people and expect the innovation performance of the firm to be superior. Similarly, it is not enough for firms to emphasize management practices to enhance creativity and ignore individual mechanisms. Although it is true that doing either will improve innovation performance, doing both should lead to higher innovation levels.

Burns and Stalker, believe two important organizational approaches one approach is the mechanistic approach, suitable for stable industries, is marked by precise definition of member function and is highly hierarchical. The organic approach is more appropriate to industries undergoing change and is characterized by fluid definitions of function and interactions that are equally lateral as they are vertical.

Hage [6] declared a complex division of labor, an organic structure, and high risk strategy are relative to organizational innovation. The complexity of the division of labor is most important in among the ideas of organizational innovation, because it taps the organizational learning, problem-solving, and creativity capacities of the organization. The importance of a complex division of labor has been underappreciated because of the various ways in which it has been measured, which in turn reflect the macro institutional arrangements of the educational system within a society. These ideas can be extended to the study of inter organizational relationships and the theories of organizational change. Integrating these theories would provide a general organizational theory of evolution within the context of knowledge societies.

Methodology:

Type of this research is descriptive survey method, because it is concerned with the present and attempts to determine the status of the phenomena under investigation. Statistical population of the research is consisting of all bank managers in Golestan province that is 170 managers. By using simple random sampling 118 managers were selected and filled out the questionnaire. In order to gather theoretical information, library research was selected and the books in the libraries, together with articles found on the internet, were used. The questionnaire included 22 questions with five-point Likert scale. The questions were designed according to the standardized questionnaires used in the previous researches [4,14,13]. For assessing validity of the research tool, the questionnaire was vetted by experienced researchers. Furthermore, we used Cronbach's alpha to measure reliability. After pilot sampling, alpha was obtained as 0.88 and the greater the value of alpha, the more the scale is coherent and thus reliable. Some authors have proposed a critical value for alpha of 0.70, above which the

researcher can be confident that the scale is reliable (Encyclopedia of survey research methods, Lavrakas, P.). So it assures the reliability of the questionnaire.

Results:

In order to achieve the aims of the research, three hypotheses were raised and also the views of managers towards the independent variables (Individual factors and organizational factors) and the dependent variable (Innovation) are measured by using the research tool. Simple and multiple linear regressions were used for understanding which variables are effective on innovation of managers. Results of the hypotheses tests are presented in following tables:

First Hypothesis Testing:

H_0: Individual factors are not effective on innovation of managers.

H_1: Individual factors are effective on innovation of managers.

Individual variable is made up of four components: Knowledge and expertise of the manager, intellectual ability of manager, motivational factors, temperament and nature of the manager. First we use regression for the components of individual variable, and then the overall regression test for the variable is done.

Table 1: Multiple regressions for components of individual factors effecting innovation.

Significance of the Model	Correlation Coefficient	R Square	Adjusted R Square	Std. Error
0.000	0.537	0.289	0.264	0.314

Table 2: Coefficients of the regression.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	1.68	0.225	-	7.50	0.000
temperament and nature of the manager	0.155	0.067	0.199	2.290	0.024
motivational factors	0.077	0.030	0.214	2.604	0.010
knowledge and expertise of the manager	0.089	0.033	0.235	2.685	0.007
intellectual ability of manager	0.116	0.043	0.224	2.679	0.008

Results of Table 1 suggest that the multiple correlation coefficient was calculated as 0.537, and the coefficient of determination is equal to 0.289. In other words, it shows that the four components (Knowledge and expertise, intellectual ability, motivational factors, temperament and nature of the manager), can explain 28.9 percent of innovation of managers. Significance level of the model was obtained as 0.000 that shows with 95 percent confidence the model is significant. So the null hypothesis -indicating no impact of the aforementioned components on innovation- is rejected and it results that the components are effective on innovation of the managers. According to regression coefficients presented in table 2, all coefficients are significant at 5% level. Furthermore, beta coefficients suggest that "knowledge and expertise" component with the weight of 0.235, compared to other components has the leading role in innovation of managers. Intellectual ability, motivational factors, and temperament and nature of the manager, respectively with the weights of 0.224, 0.214 and 0.199 have got second to fourth priorities in affecting managers' innovation. This variable (individual factors), in general was studied by simple linear regression, and following results were obtained:

Table 3: Simple linear regression of individual factors on managers' innovation.

Significance of the Model	Correlation Coefficient	R Square	Adjusted R Square	Std. Error
0.000	0.524	0.274	0.268	0.313

Table 4: Coefficients of the regression.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	1.665	0.208	-	8.013	0.000
Individual factor	0.446	0.067	0.524	6.619	0.000

Results of regression in table 3 shows that if other variables are constant, individual factors can explain only 27.24 percent of variation of managers' innovation variable. F test is significant at the 5% level, therefore the null hypothesis indicating no effect of independent variable (individual factors) on innovation variable, is rejected. So with the 95 percent of confidence, individual factors are effective on managers' innovation.

Second Hypothesis Testing:

H_0: Organizational factors are not effective on innovation of managers.

H_1: Organizational factors are effective on innovation of managers.

Organizational variable is made up of six components: The structure, Organizational culture, Leadership, Reward systems, Training systems, and Facilities. First we do regression for the components of organizational factors variable, and then the overall regression test for the variable is done.

Table 5: Multiple regression tests for components of organizational factors effecting innovation.

Significance of the Model	Correlation Coefficient	R Square	Adjusted R Square	Std. Error
0.000	0.600	0.360	0.326	0.300

Table 6: Coefficients of the regression.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	1.554	0.208	-	7.471	0.000
Structure	0.079	0.031	0.195	2.518	0.013
Organizational culture	0.090	0.045	0.158	2.040	0.046
Leadership	0.056	0.021	0.202	2.632	0.010
Training systems	0.081	0.026	0.243	3.109	0.002
Reward systems	0.133	0.034	0.303	3.949	0.000
Facilities	0.050	0.025	0.156	2.009	0.047

Results of Table 5 suggest that the multiple correlation coefficients were calculated as 0.6, and the coefficient of determination is equal to 0.36. In other words, it shows that the six components of organizational factors (The structure, Organizational culture, Leadership, Reward systems, Training systems, and Facilities) can explain only 0.36 percent of innovation of managers. Significance level of the model was obtained as 0.000 that shows with 95 percent confidence the model is significant. So the null hypothesis -indicating no impact of the aforementioned components on innovation- is rejected and it results that the components are effective on innovation of the managers. According to regression coefficients presented in table 6, all coefficients are significant at 5% level. Furthermore, beta coefficients suggest that "reward system" component with the weight of 0.303, has the leading role in innovation of managers. Other components in order of importance on managers' innovation are: Training systems (0.243), leadership (0.202), structure (0.195), organizational culture (0.158), and facilities (0.156). This variable (organizational factors), in general was studied by simple linear regression, and following results were obtained:

Table 7: Simple linear regression of organizational factors on managers' innovation.

Significance of the Model	Correlation Coefficient	R Square	Adjusted R Square	Std. Error
0.000	0.579	0.335	0.329	0.299

Table 8: Coefficients of the regression.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	1.535	0.197	-	7.775	0.000
Organizational factors	0.493	0.065	0.579	7.639	0.000

Results of regression in table 7 indicate that if other variables are constant, organizational factors can explain only 33.5 percent of variation of managers' innovation variable. F test is significant at the 5% level, therefore the null hypothesis indicating no effect of independent variable (organizational factors) on innovation variable, is rejected. So with the 95 percent of confidence, organizational factors are effective on managers' innovation.

To answer the question of which of the independent variables have greater effects on the dependent variable, we did a multiple regression by entering both individual and organizational factors. The results are presented in the following table:

Table 9: Multiple regressions for individual and organizational factors effecting innovation.

Significance of the Model	Correlation Coefficient	R Square	Adjusted R Square	Std. Error
0.000	0.663	0.439	0.424	0.277

Table 10: Coefficients of the regression.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	1.058	0.215	-	4.922	0.000
Individual factors	0.198	0.080	0.233	2.487	0.014
Organizational factors	0.337	0.069	0.395	4.897	0.000

Results provided in table 9 show that individual and organizational factors variables can explain only 43.9 percent of managers' innovation variable. F test is significant at 5% level. So the null hypothesis is rejected and we conclude that with confidence of 95 percent, individual and organizational factors are effective on managers'

innovation. Based on calculated beta coefficients in table 10, organizational factors with the coefficient of 0.395 have a greater effect on managers' innovation than individual factors.

Conclusion:

The effects of individual components of the creative directors were determined by using multiple regressions. If all other variables constant, four components (the mood and nature of the Director – Motivational Factors –Science Specialist Mental Capacity Manager), explain only 28.9% creativity of managers. In other words, 28.9% Changes in creativity of managers are affected by the individual components. Furthermore, results of the research shows, there is a significant relation between components of organizational and creativity of managers also affect other variables in the same general organizational factors 33.5% is confirmed by this variable. Thus, it can be said with a confidence of 99% organizational factors are effective in creativity of managers. For finding the most important organizational factor influencing on creativity of managers; reward factor with 0.301, education 0.243, leadership 0.202, organizational structure 0.105, organizational culture 0.158 and facility is made up 0.156.Consequently, reward is the most important factors among the components of organizational factors.

REFERENCE

[1] Amabile, T.M., 1996. Creativity and Innovation in organizations, Harvard Business School: 9: 396-239
[2] Ambile, T.M., Grayskiewicz, 1987. Creativity in the R&D laboratory. Technical Report Number 30. Greensbore, NC: Center of Creative Leadership
[3] Arad, S., M.A. Hanson, R.J. Schneider, 1997. "A framework for the study of relationships between organizational characteristics and organizational innovation", The Journal of Creative Behavior, 31(1): 42-58.
[4] Arghavani, F., 2000. Review and analysis of organizational culture on creativity in the industrial units in Qom, Thesis of Master Degree of Governmental Management, Tehran University
[5] Encyclopedia of survey research methods, Lavrakas, Paul J., SAGE Publications, Inc.
[6] Hage, J.T., 1999. Organizational Innovation and Organizational Change, Annual Reviews, 25: 597-622.
[7] Hatch, M.J., M. Schultz, 1997. Relation between Organizational Culture identify and image, European Journal of Marketing, 31(5):356-365.
[8] Herberg, P., L. Jacobs, 1996. Creative problem solving style in the USA and Japan, International Marketing Review, 13(2): 63-71.
[9] Johnson, D.J., 2001. Success in innovation implementation, Journal of Communication Management, 5(4): 341-359.
[10] Masnan, M.J., N. Akmar Ishak, N. Abdulrahim, A. Mohd Nor, N.H. Hamzah, 2008. Role of organizational culture in stimulating creativity and innovation among engineering students.
[11] Patterson, C., 2002. Individual and Organizational Creativity.
[12] Perry, J.L., L.W. Porter, 1982. Factors affecting the context for motivation in public organizations, the Academy of Management Review, 7(1): 89-98.
[13] Sadeghi, M., 2005. Design to explain model for creativity in research institutes of Iran, Doctoral thesis in Management System, Tehran University.
[14] Sajadi, H., 2004. Factors affecting hospital staff of creativity and innovation, Thesis of Master Degree of Health Care Management, Tehran University
[15] Sapolsky, H.M., 1962. Organizational Structure and Innovation, The Journal of Business, 40(4): 497-510.
[16] Sunder, B., A. Menon, 2003. Making Innovation Happen in Organizations: Individual Creativity Mechanisms, Organizational Creativity Mechanisms or Both? Journal of Product Innovation Management, 17(6): 424-434.