

SURVEYING THE IMPACT OF INTENTIONAL ORGANIZATIONAL FORGETTING ON TECHNICAL INNOVATIONS

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Abstract

The description of correlation is methodology of this research. The main purpose of this study is surveying the Impact of Intentional Organizational Forgetting on technical innovations. The population of this research includes of all small and middle established employees who work in Ardabil industrial cities. Sampling method is the simple random method which based on Cochran formula, 132 companies were selected as the sample size. This data collected by questionnaire. We have used multi variable regression for analyzing and meaningfulness of the data. The findings show that any dimensions of intentional organizational forgetting, learning relaxation and avoiding bad habits have the power of explaining and predicting technical innovations.

Key words: *intentional organizational forgetting, knowledge, technical innovation.*

Introduction

In this research we are trying by representing technical innovation as an effective factor in intentional organizational forgetting and also we try to determine these variables relations.

During past decades, organizations have informed comprehensively about the value of knowledge management and many researches are done about this issue. Knowledge management as one of the most important organizational variables needs to settle a new system for learning, compiling, preserving and scattering knowledge through the organization. This system in addition to fostering organizational learning should be able to prevent from forgetting necessary knowledge from one hand and be able to foster organizational forgetting from other hand. Forgetting data, technics and valuable knowledge of organizations should lead to lose the competitive advantages, but in some positions, organizational forgetting leads to increase of rivalry and deleting the knowledge's non-necessary elements (De Holan, 2004).it seems that this phenomenon is a necessary process in change management (Fernandes and Sune, 2009).

By Extensive and ongoing changes in the environment, organizations are facing new challenges. These challenges are to such an extent that even successful companies cannot easily repeat with usual production and technology the successes (Azmi, 2005). As cited by Perahald and Lieberthal, this phenomenon is called end of Companies Empire and success in due to the merging of markets, innovations, resource transfer and learning new knowledge (Perahald and Lieberthal, 2003).

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The concept of organizational forgetting even though is comprehensible but its mechanism is not known. since organizational forgetting can influence the competitiveness of the organization or firm, organization need process to be sure that unnecessary knowledge is deleted and necessary knowledge is not forgotten. Organizational forgetting is consequence of a set of actions which can be originated from inside or outside decisions of the organization. Organizations should look systematically and intentionally and organized to the organizational forgetting if they want to reach to the positive results (Besanko et al, 2007).

From Pablo, Holan and Philips (2004;46) organizational knowledge make the collective action possible and that is a cause and effect understanding which leads to experience and in common models of people and their assets, processes, rules and standard operating routes of a company is saved. So organizational learning is related to the processes by which companies do increase their knowledge from science and abilities. And on the contrary, organizational forgetting is losing such a knowledge (Holan et al, 2004; 46).

Intentional forgetting; in a case that unintentional forgetting can lead to competitiveness of a company, intentional forgetting can increase it. This kind of forgetting occurs in two ways. In first way managers delete the knowledge which can lead to a change in organization. In second way, managers delete the knowledge which potentially can lead to a change in an organization. In second one, managers recognize the potentially harmful knowledge and prevent it from being added to the recent knowledge of the organization. In both cases forgetting is an active process which organization manages it intentionally (Holan et al, 2004; 4).

1) Learning relaxation; for learning relaxation of knowledge, a company intentionally removes what is saved in its memory. This process can be as important as learning especially whenever a company needs to get rid of a knowledge which weakens its success.

2) Avoiding bad habits; organization like people can learn bad habits. Successful companies can forget such knowledge before being embedded in its memory. To achieve this goal, a company should be able to distinguish between useful knowledge and potentially bad habits. So companies can forget in one of the four ways (memory loss, inability to understand, learning relaxation and avoiding bad habits) due to intentional or unintentional loss of data.

Fernandez and Sune express that organizational forgetting is in relation with innovation. If an innovation is occurring in an organization, forgetting will be intentional and if outside the organization, it is unintentional forgetting (Fernandez and Sune, 2009).

According to the study literature of accidental samples and analyzing quantitative data there are four factors which strategic innovation encompasses them are as follows; value innovation, creating new markets, removing rivalry. Technical innovation is related to changes in innovation of products and services and also production process technologies (Damanpour, 1991). Production innovation is called to producing new products or response to the market requests and process innovation are new elements which are used in organizational productions or service activities (Damanpour & Gopalakrishnan2001). Technical innovation is related to innovation in production and service and technology of production process (Damanpur, 1991). Production and process innovation is called to creating new product or responding to the market request and process innovation are new elements which are used in service and production activities of an organization. Dimensions of the concept of technical innovation are innovation in products and services and innovation in production processes.

Now, this research is going to answer to this question that what are the relation between organizational forgetting and technical innovation? So in the research we would pay attention to the determination of the dimensions of intentional forgetting impact on technical innovation variables.

Methodology

In this research the main method is based on being applicable goals. Number of statistical community is 200 small and middle active industrial companies of Ardebil industrial city, this number is chosen according to previous researches. According to Cochran formula, 132 firms were chosen as the sample.

In this research, we used limited questionnaire for measuring Likert spectrum. This questionnaire includes 6 questions which pay attention to avoiding bad habits and learning relaxation and innovation scale consisting of 5 questions which is designed by the researcher himself and is originated from Hung Ming 2007 in order to measuring technical innovation and includes 5 items.

In order to analyze the obtained data, two methods of descriptive and deductive are used. Descriptive statistics were used to describe the scattering parameters of variables and demographic characteristics of the sample out, posing, median; standard deviation and variance were used. And in deductive statistics it was used to test the research hypotheses. SPSS was used for data processing.

For collecting data we used researcher made questionnaire in the spectrum of Likert and also we used the managers of small and medium firms of Ardebil for fulfilling the questionnaires. so, for the hypothesis testing first Smirnov and Kolmogorov test is done. The data was normal, so, we have used multi variable regression for analyzing of the data.

Results

In the multiple regression equation to determine the coefficient of determination (R^2) and the weight of each variable (Beta) a collection of independent variables in the equation are used. Moreover, in order to determine the contribution of each variable in explaining the dependent variable we used the multiple regressions. In this method, the independent variables were entered simultaneously and their effects on the dependent variable analyzed and determined. The independent variables were simultaneously entered into multiple regression equations are; learning relaxation

H. Effect of organizational forgetting on technical innovations

In this section for determining the effect of organizational forgetting on technical innovative variable we use regression analysis.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.546 ^a	.298	.285	.54324

According to the regression analysis table (1) multiple correlation coefficient R is equal to 0.546 and Adjusted coefficient of determination (R^2) is approximately 0.30 percent therefore safe to say that virtually 0.29percent of technical innovations change are related to dependent variables (learning relaxation, avoiding bad habits) .in other words it can be said that 0/29 percent of changes in technical innovation is related to learning relaxation and bad habit avoid variables, so dimensions of organizational forgetting is able to predict the technical innovation.

Table 2: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	13.786	2	6.893	23.357	.000 ^a
Residual	32.463	110	.295		
Total	46.249	112			

The results of table (2) show the regression variance analysis of data which the measured F is 23.357. Since meaningfulness level is smaller than fault level, we conclude that regression equation is approved, so seen determination coefficient in equation is meaningful statistically.

Table 3: beta regression coefficient results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.642	.344		4.772	.000
Learning relieved	.414	.105	.353	3.938	.000
Avoiding bad habits.	.308	.097	.285	3.177	.002

According to the results of table (3) we infer that for explaining the technical innovation in small and medium industries investigated in Ardebil, learning relaxation variable has more explanatory power than avoiding bad habit variable.

Conclusion

In this research, we investigated the impact of intentional organizational forgetting on technical innovation among the managers of small and medium industries in Ardebil city. Intentional organizational forgetting with two dimensions of learning relaxation and avoiding bad habits were analyzed and regarded that they have certain roles in technical innovation.

Statistical community of the recent research is managers of small and medium industries of Ardebil city which according to Cochoran sample, among 200 firms we chose 132 firms as sample ones. And finally multi variable regression was used for determination of the amount of dependent variable.

The hypothesis of the research are approved according to results, so it can be said that between any dimensions of the organizational forgetting and technical innovation. There is a direct correlation. And also according to the findings of the research we regarded that any dimensions of intentional organizational forgetting, learning relaxation and avoiding bad habits have the power of explaining and predicting technical innovations.

We recommend to the managers of the firms that encourage employees to learn new knowledge and appreciate the employees who deleted abandoned knowledge and are seeking to find new methods.

- Innovative procedures and thoughts would be appreciated and be supported.

- Employees avoid the bad knowledge which harms the organization and they try to learn new applicable and useful knowledge and abandon the old ones.
- To form innovation and creativity classes for the employees.
- Pay more attention to value innovation and innovations of entering markets in industrial areas.
- Form a common management and use employees in decision making processes.
- Creating research centers for developing technical and executive innovations and also developing financial systems in order to improving productivity and lessening the expenses.
- Reforming the distribution of goods systems or servicing innovatively in Ardebil industrial areas.

References

1. Azmi, F. T. (2005). Mapping the Learn-Unlearn-Relearn Model Imperatives for Strategic Management. *Indian journal of training & development*, pp. 4-14.
2. Besanko D., Doraszelski U., Kryukov Y. and Satterthwaite M. (2007). Learning-by-doing, organizational forgetting and industry dynamics.
3. Damanpour, F. & Gopalakrishnan, S. (2001). The dynamics of the adoption of product and process innovations in organizations. *Journal of Management Study*,38(1), 45–65.
4. Damanpour, F. (1991). Organizational innovation: a meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34(3), 555–90.
5. De Holan, P. M. (2004). Managing Organizational Forgetting. *MIT Sloan management review*, pp. 44-52.
6. Fernandez, Vicenc and Sune, Albert. (2008), Organizational Forgetting and its Causes: an Empirical Research, *Universitat Politecnica de Catalunya Kransdorff* (1998). *Corporete amnesia. The future of money*, pp. 95-104.
7. Holan, P., Denelson Ph., Thomas b. Lawrence. (2004). Managing organizational forgetting, *Mit sloan management review*, Vol. 45, No. 2, pp.45-51.
8. Prahalad C. K. and Lieberthal, K. (2003). End of Corporate Imperialism. *Harvard business review*, pp. 109-117.