

Investigating the relationship between intentional organizational forgetting and organizational agility

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Abstract:

The present study is conducted aimed to investigate the relationship between organizational forgetting and organizational agility in Islamic Azad University of Damavand. The research method is descriptive correlation and statistical population includes employees and managers of Islamic Azad University of Damavand to the number of 200 individuals. Simple random sampling is used and the sample size is selected 147 individuals according to Jersey Morgan table. In this study, two questionnaires of intentional organizational forgetting and questionnaire of Hosseini organizational agility are used. To assess the validity of the questionnaires, the validity of judgment was used that was confirmed by experts and supervisors. The coefficient of reliability for the questionnaires of organizational forgetting and organizational agility questionnaire containing 15 questions for organizational forgetting and 36 questions for organizational agility, respectively, equal to 0.826 and 0.87 was calculated. With regard to this that at least reliability coefficient for research questionnaires is 0.70, it is noted that Cronbach's alpha coefficient obtained is higher than this amount. To analyze the data, descriptive and inferential statistics were used. The results of correlation of Spearman coefficient test showed there is a positive and significant relationship between organizational forgetting and organizational agility as well as the organization in terms of agility is placed in an acceptable level. Finally, according to the results of research, some proposals were presented.

Keywords: organizational forgetting, organizational agility, Islamic Azad University of Damavand

Introduction:

Agility word is descriptor of responsive speed and strength in the face of internal and external events of organization. Agile organization is designed to understand and predict changes in the business environment and in this regard structures itself. The basic factors that cause to create and improve agility of organization can name knowledge, flexibility and productivity. Agile manufacturing is a way to shift production method, design and create management and marketing large and small organizations. Agility is actually a new paradigm for engineering competitive firms. The need for this new paradigm is based on the increase of rate of change in the environment.

A challenge that now organizations are facing with it is the effort to grasp a knowledge that strengthens the competitive advantage, organizational creativity and innovation power in them and increases organizational knowledge richness, this issue will be provide by creating opportunities in order to sharing knowledge.

According to extensive research on knowledge management, still some points and cases are ambiguous in current discussions of organizational knowledge. ((Companies not only learn, but also forget)) in fact, knowledge management is following to create process that not only is used to learn and protection of useful knowledge, but used for lack of learning and avoid what is not useful, forgetfulness is not simple as learning and may be harmful or beneficial. However, in such a dramatic both in positive and intentional aspect and in negative aspect in competitiveness of an organization will be effective (Rabiei and Moshabaki, 2009)

Intentional organizational forgetting contains a set of actions that an organization does to facilitate forgetting of the non-essential data and prevent the destruction of useful data. This set of actions is carried out in three areas, namely: planning, implementation, evaluation, the concept of organizational forgetting although easily is understandable, but the mechanism of its happening is not well recognized in the organization. Since organizational forgetting could affect the competitiveness of the company or organization, organization needs processes to ensure a knowledge that should be discarded, forgotten and a knowledge that is useful, not to be forgotten. Organizational forgetting is not the inability of the organization in learning, it is sometimes necessary to organization set asides consciously its existing knowledge and sometimes knowledge is disappeared unconsciously and by the passing time (Tham et al., 2008).

From a baseline, a knowledge that is forgotten in the organization can be new knowledge to organization or available and old knowledge to organization. Consider an organization that initially agreed to enter a specific technology and after a while due to the failure of the technology makes it

aside and forgets the learning taking place in this area. In this case, organization is faced with forgetting a new knowledge to organization. In either case, it can be mentioned of an organization that asides several years of knowledge in the field of producing a specific commodity and begins to produce other product.

In this case, organization wants to forget its old and available knowledge. These two types of forgetting can have positive or negative consequences (Di Helen, 2004).

Therefore, in addition to promoting organizational learning, it should have its power to prevent forgetting necessary and useful knowledge on the one hand and on the other hand can prevent non-useful knowledge (organizational forgetting). Despite the need to develop organizational learning capabilities, research has shown that organizations not always learn easily. Conklin, states that organizations naturally tend to forget (Conklin, 2001).

In this study, it will be tried using theoretical studies to identify the most important factors that lead the organization toward forgetting and then investigate its relationship with organizational agility.

The purpose of this paper is to identify the relationship between intentional organizational forgetting and organizational agility in Islamic Azad University of Damavand and also investigating the status of organizational agility of employees and managers of Islamic Azad University of Damavand.

This paper tries to prove or disprove these hypotheses that there is a significant relationship between intentional organizational forgetting and organizational agility in Islamic Azad University of Damavand. Employees and managers of Islamic Azad University of Damavand are at an acceptable level in terms of organizational agility.

Industrial conditions in past 15 to 20 years have fundamentally changed. During this period, technology, market conditions and customer demands have changed quickly and in different directions, while these changes are less considered previously. For example, some of the challenges listed below, including segment dynamic markets, reduce time to market, increase product variety, produce to specified customers, shorten product life, the globalization of production and so on. In the era of global competition, global economy is quickly replaced local markets. The emergence of open markets, reduce trade barriers, improve transport and communication links lead to a situation in which markets and local competitions act as a global standard. As a result, today's industrial enterprises are facing new challenges and competitive pressures. Project of next generation of production systems in the Massachusetts Institute of Technology (MIT) emphasizes on agility in responding to customer, network in the global market, participation of employees, integrity in business model developed, competency development and knowledge management. Industrial fields changed seek new capabilities. Rayz and Johansson consider the ability of industrial enterprises to adapt quickly and

precisely to changing conditions as a key factor for future success and they express that in this process, firm must integrate and unify a large number of managerial, organizational and technological supervision (Rayz and Johansson, 53, (2001)

Gris and Kasarda (1997) acknowledged that competing priorities have changed and new era of high-speed global economy is caused to change operational strategies of companies. In this era, competitive price and high quality are essential but not the determining factor of business success instead, speed to market and respond quickly and flexibly to customer as a fundamental principle has been taken into account. That's why the importance of speed and agility is increased and become successor of last competition priorities - more than a quarter century were dominated over production. Agility is a new paradigm in the production environment. Production environment has passed several transformation (of craft to mass production and now the latest complete sample ie agility) and created by more desirable demands to maintain priority in a constantly changing environment and by the small sizes, modular and production of precious information is replaced (Dow, 1994), agility is different with pure and mass. For example, pure production is called to a kind of flexible operational architecture. While agility creates reshaping operational architecture at the same time, agile-based competition is considered to eject competition based on mass production as software for international trade (Goldman et al., 1995).

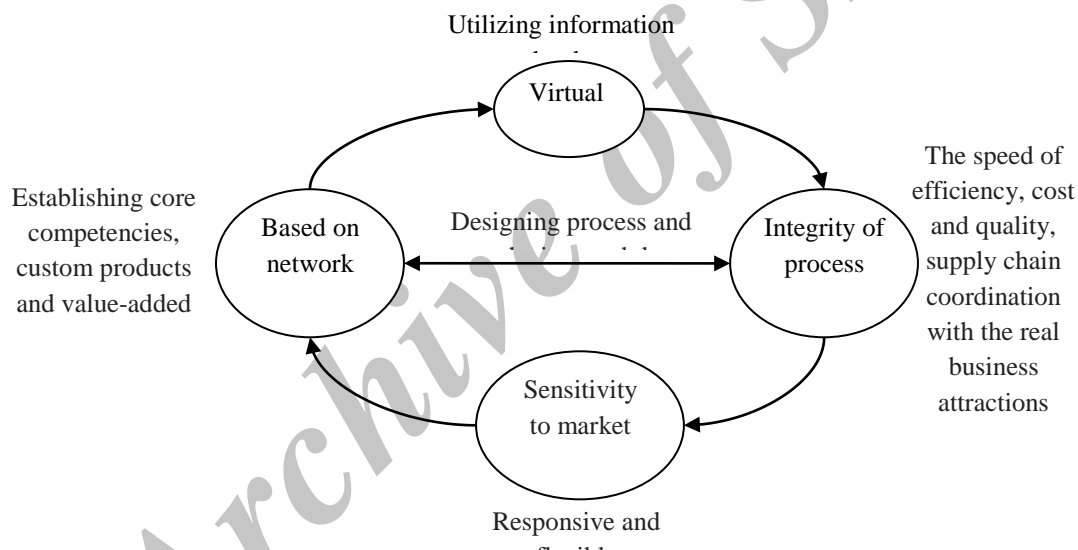
Manufacturing firms need to be professional to succeed in changes. "Dow" is distinguished between operational strategies and transitional strategies (resolution). "Dow" considers total quality management (TQM), statistical process control (SPC) and Business Process Reengineering (BPR) as current transfer strategies and, pure production, customer focus, production based on mass customer demands, network enterprises, learning organizations and virtual firms as examples of operational strategies and ultimately considers agility as the main requirement of business to achieve profitability and compatibility of organization. All of the above can be seen in Figure 1 (Dow, 1994).

At the beginning of the twenty-first century, the world was faced with dramatic changes in all aspects of market competition, technological innovations and customer needs. Because in mass markets, demand and customer expectations are rising quickly, looking for dividing their markets. Companies have found that agility is essential for their survival and competitiveness. In addition, it is evident that no company has all the necessary resources to give every opportunity in the market. So, to gain the competitive border in the global market, companies must keep pace with suppliers and customers to integrity of synchronized operations and to achieve an acceptable level of agility cooperate with each other that overall, referred to it as agile supply chain.

The development of agile supply chain

Today, organizations have found that agility is critical to their survival and competitiveness, in this regard; organizations must be unified with suppliers and customers to achieve higher levels of agility to adapt with changing and competitive environment. In other words, ASC or agile supply chain is considered as a winner competitive strategy for the leaders of organization. Yosuf and colleagues in 2004 refer to the combination of agility concept in the supply chain as a competitive advantage of the world. Structurally, ASC moves independently, but operationally step with sectors as suppliers, designers, builders, distribution services etc. interdependently.

By connecting the flow of materials and information feedback, ASC focuses on adaptability and flexibility to quickly and effectively react to changing markets. In general, a supply chain to achieve agility should have a number of distinctive features that have been mentioned in Fig.



Agile supply chain framework (completed by Christopher, 2000 and Van Hook, 2001)

Based on this figure, main pillars and empowerments divide agile supply chain into four categories:

1. **collaborative relationships in the networks:** supply chain strategy is the ability to attract buyers and suppliers to work in partnership and joint development of products and information systems.
2. **Process integration:** Integration in the process means that the nuclear supply chain is partners that are connected to a network and by performing specific activities follow a specific purpose jointly.
3. **The integrity of information:** this case as a supply chain infrastructure involves the ability to use information technology to share data between buyers and suppliers and as a result, create an effective virtual supply chain. It should be said that virtual supply chain is based on information not

based on inventories.

4. Sensitivity to the customer: This case as basis and axis of supply chain involves ability to perceive, identify and respond to the current needs of the customer as well as change and uncertainty. A real agile supply chain is sensitive to market and responsive to customers. This means that the supply chain can predict and meet customer needs, and also be flexible to changes and uncertainty conditions.

In addition to the components listed, Pover and Sohal (2005) in an article called key factors in the success of agile supply chain management have acknowledged that computer-based technologies participative leadership, resource management, enablers of continuous improvement, communication with suppliers and the use of technology lead to the success of the chain agile supply that these factors are found in the survey analysis of 962 industrial companies.

Conceptual model in order to achieve agile supply chain

Simultaneous and parallel development in the areas of agility and SCM is an introduction to create agile supply chain (Christopher, 2000). According to Ismail and Sharif (2005), agility in the supply chain is the ability to unite with the network (members) and respond to dynamic environment to meet changing customer requirements. Compared with the general definition of agility, agility in the supply chain can be defined in the following way (Sharp et al., 1999): "Agility is the ability to supply chain to respond quickly to market changes and demands of customers."

Supply chain can be divided into three main sections: sourcing, production and delivery. The combination of this part of supply chain on the one hand and speed and delivery on the other hand is productive of definition of agility in the supply chain. A range with which the company is gained to agile supply chain, through the formation of its physical parts to have speed and flexibility is determined. The more levels of speed and, most importantly, flexibility increases, agility level of the supply chain also increases (Porter et al., 2001).

Hosseini and colleagues (2011) conducted a study aimed to identify the organizational forgetting. In this survey after investigating organizational forgetting, three dimensions of organizational forgetting are identification and the relationships of these three dimensions in three hypotheses have been examined. Thus, structural equation modeling was used to measure the hypotheses. The results of the study confirmed research hypotheses that are the relationship between the kind of knowledge forgotten, the forgetting method and consequences of forgetting.

Moshabbaki and colleagues (2012) express that two major dimensions of knowledge management for gaining competitive advantage in organizations include: organizational learning and organizational

forgetting. Therefore, in this study, it was tried to be raised the concept of intentional organizational forgetting as a conceptual mode and its relationship with transformational leadership styles and pragmatic investigated.

Nambhard and Bentfud (2012) have used a mixed and integer non-linear programming to measure output of production according to the process of learning and forgetting of employees. In this study, efficacy of information was assessed in reducing the complexity of production problems.

Gagnon and Shu (2000) combined non-linear and integer programming in order to minimize the costs of organization. The main objective of this research is strategic selection that has the lowest cost, while improving performance of learning and forgetting process of people.

Wong et al (2012) express that the learning processes and organizational forgetting is very important in construction projects. In this study, the effect of de-learning is studied in the relationship between organizational learning and success of the organization. The results of this study show that de-learning that is one of the important aspects of organizational forgetting has a positive impact on the relationship between the two components.

Enterprise resource planning system is a comprehensive system that tried to integrate all available functions and divisions in an organization using a single computer system that can meet the specific and special needs of these sectors.

But the projects of enterprise resource planning will not be accepted by the individuals of organization and first implement a module of the system.

Cheng et al (2012) express that the adoption of an Enterprise Resource Planning system to a large extent depends on processes of forgetting and organizational learning. The results of this study show that employees in the process of adoption of new technologies will benefit from a system of internal decision making.

Research Methodology

The present study is an applied research objectively and in terms of collecting information regarding the aim of this study is to investigate the relationship between organizational forgetting on the organizational agility, so this study is correlational survey. Because the data considered through

sampling of population is conducted to investigate the distribution of population characteristics, this study is a survey research.

In this study, population consists of employees and managers of Islamic Azad University of Damavand.

In this study, the sample consisted of 147 employees and managers of Islamic Azad University of Damavand who are selected randomly through Jersey- Morgan table. In this study, data is collected through field method.

The validity of the research tool

To ensure the reliability, the validity of judgment was used so that questionnaire was given to teachers, scholars and experts such as professors in management and static major and also managers that their view confirmed the validity of questionnaire.

Reliability of research tool

The reliability coefficient for the questionnaires of organizational forgetting and organizational agility questionnaire containing 15 questions for organizational forgetting and 36 questions respectively for organizational agility, respectively, is calculated equal to 0.826 and 0.87 respectively. With regard to this that at least coefficient of reliability for research questionnaires is 0.70, it is noted that Cronbach's alpha coefficient obtained is higher than this amount.

In this study, using both descriptive and inferential statistics methods, data are analyzed. In the descriptive statistics, tables and frequency distribution diagrams and mean and standard deviation, skewness and kurtosis and... will be used and in inferential part, using SPSS software first using Kolmogorov-Smirnov test, normality or abnormality of population will be specified then research hypotheses are tested with proper correlation coefficient test.

Data analysis:

Analysis of demographic questions of samples studied

Based on age

A total of 147 subjects who have completed the questionnaire, 11.56% of them were younger than 35 years, 25.85% between 40-35 years, 28.57% between 45-40 years, 13.6 percent more than 50 years.

Based on gender

83% were male and 17% were women.

Education

3.4% of people have diploma degree or high school, 10.2% associate degree, 51% have a bachelor's degree and 35.4% a master's degree and above. So the most frequency is related to people who have a bachelor's degree and the lowest frequency is related to master's degree owners and higher.

Based on marriage

82% are married and 18% are single. So the most frequently is belonged to people who are married and the lowest frequency belongs to the people, who are single.

Testing hypotheses:

Test the relationship of changing dimension in operational processes and organizational agility

The initial hypothesis (H0): There is no significant relationship between the changing dimension in operational processes and organizational agility in Islamic Azad University of Damavand.

Research hypothesis (H1): there is a significant relationship between the changing dimension in operational processes and organizational agility in Islamic Azad University of Damavand.

$$\begin{cases} H_0: \rho = 0 \\ H_1: \rho \neq 0 \end{cases}$$

			Operational process	Agility
Spearman	Operational process	Correlation coefficient	1.000	.534**
		Significant level	.	.000
		Number	147	147
	Agility	Correlation coefficient	.534**	1.000
		Significant level	.000	.
		Number	147	147

The test result indicates that considering the calculated level of significance is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that there is a significant relationship between the changing dimension in operational processes and organizational agility.

Test the relationship of changing dimension in organizational ideas and agility

The initial hypothesis (H_0): There is no significant relationship between the changing dimension in organizational ideas and agility in Islamic Azad University of Damavand.

Research hypothesis (H_1): there is a significant relationship between the changing dimension in organizational ideas and agility in Islamic Azad University of Damavand.

Statistical hypothesis

$$\begin{cases} H_0: \rho = 0 \\ H_1: \rho \neq 0 \end{cases}$$

The results of second sub-test

Correlation coefficient				
			Ideas	Agility
Spearman	Ideas	Correlation coefficient	1.000	.471**
		Significant level	.	.000
		Number	147	147
	Agility	Correlation	.471**	1.000

		coefficient		
		Significant level	.000	.
		Number	147	147
**. Correlation is significant at the 0.01 level (2-tailed).				

The test result:

The test result indicates that considering the calculated level of significance is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that there is a significant relationship between the changing in organizational ideas and agility.

Test the relationship of dimension of physical procedures and organizational agility

The initial hypothesis (H_0): There is a significant relationship between the changing dimension in physical procedures and organizational agility in Islamic Azad University of Damavand.

Research hypothesis (H_1): there is a significant relationship between the changing dimension in physical procedures and organizational agility in Islamic Azad University of Damavand.

Statistical hypothesis

$$\begin{cases} H_0: \rho = 0 \\ H_1: \rho \neq 0 \end{cases}$$

			Physical Procedures	Agility
Spearman	Physical Procedures	Correlation coefficient	1.000	.530**
		Significant level	.	.000
		Number	147	147
	Agility	Correlation coefficient	.530**	1.000
		Significant level	.000	.
		Number	147	147
**. Correlation is significant at the 0.01 level (2-tailed).				

The test result:

The test result indicates that considering the calculated level of significance is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that there is a significant relationship between the changing dimension in physical procedures and organizational agility.

Test the relationship of changing dimension in environment and organizational agility

The initial hypothesis (H0): There is no significant relationship between the changing dimension in environment and organizational agility in Islamic Azad University of Damavand.

Research hypothesis (H1): there is a significant relationship between the changing dimension in environment and organizational agility in Islamic Azad University of Damavand.

Statistical hypothesis

$$\begin{cases} H_0: \rho = 0 \\ H_1: \rho \neq 0 \end{cases}$$

Correlation coefficient				
			Environm ent	Agility
Spearman	Environment	Correlation coefficient	1.000	.436**
		Significant level	.	.000
		Number	147	147
	Agility	Correlation coefficient	.436**	1.000
		Significant level	.000	.
		Number	147	147
**. Correlation is significant at the 0.01 level (2-tailed).				

The test result:

The test result indicates that considering the calculated level of significance is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that there is a significant relationship between the changing dimension in environment and organizational agility.

Sub-hypothesis test 1-2- employees and managers of Islamic Azad University of Damavand in terms of speed of providing response to changes are in an acceptable level.

Statistical assumptions:

H0:P<0.60 (low speed)

H1:P>0.60 (high speed)

Hearing	Class	Number	Observed Prop.	Test Prop.	Significant level
Group 1	<= 3	22	.1	.6	.000 ^a
Group 2	>3	125	.9		
Total		147	1.0		

The test result indicates that considering the calculated level of significance is less than five percent (sig ≤0.05) therefore, the null hypothesis is rejected. It means employees and managers of Islamic Azad University of Damavand in terms of speed of providing response to changes are in an acceptable level.

Sub-hypothesis test 2-2- employees and managers of Islamic Azad University of Damavand in terms of responding are in an acceptable level.

Statistical assumptions:

H0:P<0.60 (low responding)

H1:P>0.60 (high responding)

Verbal	Class	Number	Observed Prop.	Test Prop.	Significant level
Group 1	<= 3	19	.1	.6	.000 ^a
Group 2	>3	128	.9		
Total		147	1.0		

Sub-hypothesis test 3-2- employees and managers of Islamic Azad University of Damavand in terms of flexibility are in an acceptable level.

Statistical assumptions:

$H_0: P < 0.60$ (low flexibility)

$H_1: P > 0.60$ (high flexibility)

Feedback	Class	Number	Observed Prop.	Test Prop.	Significant level
Group 1	≤ 3	27	.2	.6	.000 ^a
Group 2	> 3	120	.8		
Total		147	1.0		

The test result indicates that considering the calculated level of significance is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means employees and managers of Islamic Azad University of Damavand have high flexibility.

Sub-hypothesis test 4-2- employees and managers of Islamic Azad University of Damavand in terms of competency are in an acceptable level.

Statistical assumptions:

$H_0: P < 0.60$ (low competency)

$H_1: P > 0.60$ (high competency)

Feedback	Class	Number	Observed Prop.	Test Prop.	Significant level
Group 1	≤ 3	27	.2	.6	.000 ^a
Group 2	> 3	120	.8		
Total		147	1.0		

The test result indicates that considering the calculated level of significance is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means employees and managers of Islamic Azad University of Damavand have competency.

Discussion and conclusion:

1. The first sub-test result shows that due to the significant level calculated is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that there is a significant relationship between the change dimension in operational processes and organizational agility and this relationship is positive (0.534), ie by increase of one unit in operational process, organizational agility is increased at a rate of 0.534.
2. The second sub-test result shows that due to the significant level calculated is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that there is a significant relationship between the change dimension in organizational ideas and agility and this relationship is positive (0.471), ie by increase of one unit in operational process, organizational agility is increased at a rate of 0.471.
3. The third sub-test result shows that due to the significant level calculated is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that there is a significant relationship between the change dimension in physical procedure and organizational agility and this relationship is positive (0.530), ie by increase of one unit in physical procedure, organizational agility is increased at a rate of 0.530.
4. The fourth sub-test result shows that due to the significant level calculated is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that there is a significant relationship between the change dimension in environment and organizational agility and this relationship is positive (0.436), ie by increase of one unit in environment, organizational agility is increased at a rate of 0.436.
5. The sub-test result 1-2 shows that due to the significant level calculated is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that employees and managers of Islamic Azad University of Damavand in terms of speed of providing response to changes are in an acceptable level.
6. The sub-test result 2-2 shows that due to the significant level calculated is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that employees and managers of Islamic Azad University of Damavand in terms of responding are higher than medium level and are in an acceptable level.

7. The sub-test result 3-2 shows that due to the significant level calculated is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that employees and managers of Islamic Azad University of Damavand have high flexibility.

8. The sub-test result 4-2 shows that due to the significant level calculated is less than five percent ($\text{sig} \leq 0.05$) therefore, the null hypothesis is rejected. It means that employees and managers of Islamic Azad University of Damavand have high competency.

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