

Study the Effect of Organizational Factors to Implementing the Agility Strategy in Isfahan Municipality

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Abstract

This study aimed to recognize the effect of the managerial factors to implementing the agility strategy in municipality of Isfahan in the period of 1391-1392 was conducted and this is a descriptive survey. The data gathering tool was a questionnaire consisted of 56 questions. To confirm the validity of questionnaire the teachers' academic advisors and some managers' opinions were used and SPSS software was used to measure the reliability of that; Using this software, Cornbrash's alpha equal to 0.974, respectively. This questionnaire was distributed between managers and employees upper than 13 grade of the municipality in a random way. The Statistical volume of the sample using Cochran formula and Morgan obtained 325. Research data using various statistical tests such as the Colmogorov - Smirnov, ranking Friedman, single-sample t and Pearson correlation were analyzed. Data analysis suggests that managerial factors that include strategic thinking, willingness to empower employees and participatory management are effective to implementing the agility strategy.

Keywords: Agile Strategy, Organization And Managerial Factors

Introduction

One of the problems faced by organizations in recent years, this show the business environment is changing, Dynamic and unpredictable succeeded (Karwowski,2007)Customer expectations are continually increasing demands of today's world, led to the transformation of the business from a strategic perspective and paradigm shift in business is making(Devadasan and Vinodh., 2010).

Strategic agility is the ability of the organization to achieve lower production costs, greater market share, providing more customers, facilitating the rapid introduction of new product or service, eliminating non-value added activities and increase the competitive power of the company (Joseph et al, 2010).

Today, strategic agility, which is a growing research topic from both academic and practical aspects, will be examined to better understand the emergence, development and outcomes to be achieved (Lawler and Worley, 2010).

However, organizations need to implement a series of strategies are possible for its implementation in structure and substrate conditions.

In this study, it is important to have a media strategy to implement the agility of the municipality include organizational factors

These factors include the five key parameters of the organizational structure, corporate strategy, technology, organizational culture and organizational processes the purpose of this organization is to deal with the challenges of continued growth and development of the research hypotheses.

A review of the research literature

Lawler et al (2010) did study entitled "The agility and organizational design: a diagnostic framework". In this study, the real issue with this approach, the dynamic parallel structures, processes and systems that support it, Describes a comprehensive agile framework and the agility parameters influence on variables such as strong strategy, organizational design compatible, and leadership and identity that all of them can be Effective on sustainable performance of the organization. Then uses this framework for recognizing the agile capabilities of a major business unit called "AkmyArvaspys" In a large company in the design, development, manufacture and support of many military products, is expert. The results show that assuming global business environment is changing very fast, agile organizations is little number with only one of the organizations in this study have been somewhat agile.

Miller (2010), in his thesis entitled "agility in services: a key element of the service strategy showed that the orientation of management commitment to service quality impact, It also makes a commitment to deal with employees who have managed such that they perceive that management seeks to identify, empower and educate staff and the allocation of financial rewards to their agility. In this study the direct effect on the perception of the employees on service agility of the firm is studied. The data of this study were gathered among marketing students at a large public research university in the United States whom which of them were occupied in a service organization.

Hamidi et al (1388), in a study titled "The Role of Human Resource Management in organizational agility", showed that organizational agility requires organizational adaptability, continuous awareness of opportunities and threats, internal capabilities for using the opportunities and minimize the negative effects of potential threats and encompasses three dimensions include, exploring and reading the market, fast response . In this paper, we demonstrate to five levers to create organizational agility consisted of: fundamental values, organizational structure, core operational processes, information technology and personnel.

Olfat and Zanjirchi (1387), in a study entitled "Data Envelopment Analysis", a new approach in evaluating organizational agility ", using data envelopment analysis as a system approach and by using definite input and output data from twenty production firms, offer a model to assess the effectiveness of organizations in terms of agility (agility relative), with regard to system inputs and outputs of organizational agility system. When the stimuli changes as inputs and agile capabilities as outputs are considered for the model, they had shown in this method having a high level of capability is not the only reason for an organization to be an agile one. Because of the contrast with their highly changeable environment, this level of capabilities may be not enough (although it seems to be very good in comparison with other

organization). In this research study, there is a fundamental flaw to the mind and it makes no difference in regards to various organizations and the agility they need not be identical.

Definitions of Agility

Naylor (1999) defined Agility to this way: using market knowledge and a virtual partner to use a temporary profitable opportunities in an unstable and variable environment.

Vrnadat (1999) believes agility can be defined as the axis near to changing demands of the work in order to gain competitive advantage. In such an organization, employee goals with organizational goals in an aligned and integrated with each other, and these two are going to respond to changing customer needs.

Kayd (2000) cites this as one of the most comprehensive definitions of organizational agility "agile organization, is a fast, adaptable and informed business with fast adaptability in response to changes and unexpected and unanticipated events, the market opportunities and customer needs .In such businesses, processes and structures will be found that can be facilitates speed, adaptability and strength, also it belongs a coordinate and ordering organization which has ability to achieve competitive performance in the business environment , and of course this environment with current functions is not proportionate."

According to Jafarnejad and Shahaiee (1389), this definitions of agility, made organization dynamic, Location-oriented changeable, and growth-oriented. Likely due to the effect of dynamics in the situation where they are today, the agility of an organization, it may not be tomorrow, efficient and effective. It is also because of the tendency of the market environment that affect the agility required. Agility depends on moving the organization towards adaptability and this is a reason for variability. The last case is agility to the growth way, which is the ability to perceive and recognize the organization's vision, strategic restructuring, innovation in techniques and procedures.

In this study, the term of agility is more intended to meet changing environments and the ability to meet the challenges so the definition of agility from Sharifi and Zhang have provided a more comprehensive and affinity view of the issue.

Organizational structure

Organizational structure is a permanent visual of tasks and activities of an organization (Skivington & Daft, 1991) and it shows the different units of the organization do their activities, how information transmitted and how organizational decisions are made (Rooyee & Byers, 2003). Companies can coordinate and implement different organizational activities by using the organizational structure mechanisms (Ouchi, 1979; Robbins & Dysnzv, 2001).

Organizational strategy

Strategy is a military word and means the art of conquer to the enemy. At the first time this concept is entered to the management territory in 1960 by Alfred Chandler of the Harvard University.

Strategy is a comprehensive plan of action that determines the major orientation sand offer guide lines for resource allocation for the acquisition the long-term organizational goals. Select business strategy is a very complex and risky action; because any strategy guides the organization in a specific competitive environment and determines how management plans to accommodate the strengths and weaknesses of the organization with opportunities and threats of the environment. (Rezaeian, Ali, 1387).

Organization Technology

Agile manufacturing system needs to provide appropriate hardware and software that enables the rapid deployment of production systems for produce the same product to other products (Fathianet al, 1385). For this reason the flexibility of technology is chosen and studied as one of the efficient items for implementation agile strategy. Continuous changes in technology (the process of creative destruction) are observed as a background and prerequisite for competitiveness and being survival in today's world of global competition. In the late 1950s, Robert Solow (1957) stated that the 87.5% of the improved productivity can be made by changing technology and only 12.5% of it can be explained by economic growth. In practice, technology means a tactic knowledge that improves the ability of an organization to provide services and products (Stalk, 2000). Khalil (2000) introduce technology as knowledge, products, processes, tools, method sand systems that are employed for creating and producing goods and services. According to Khalili (2000), Technology Management involves managing the systems that process of creation, purchase; procurement and utilization of technology made possible. Goldman et al (1995) demonstrate to one of the indicators of agility with technology means easy use of technology .For this reason, this item is selected and studied as an effective factor to implementing the agile strategy.

Organizational Culture

Culture is considered as a complex mixture of real, tangible and assumptions about how people behave and how they should behave. (Hannah Gunn, 2002).

"Hofstede" believes organizational culture is a set of shared values, assumptions and beliefs of the members of the organization that identifies and distinguishes the organization from other organizations; the perception and common understanding of members of an organization is organizational culture. The role of culture or society or organization is the same as personality for individual, as personality distinguishes them from others; Culture of an organization or society is distinguished it from other organizations or communities and as community shave their own unique culture, every organization has its own culture. Success or failures of the organizations are highly dependent on their organizational culture (Gholipour, 1380).

Organizational processes

Processes are the base of management and inputs are transformed into outputs. The ability to do things with the correct processes have more competitive advantages for the company rather than using of technologies and product. Process Strategy identifies procedures of the organization for the physical production of goods and services. The decision process should help to determine how the company will compete in the market? How production decisions are supported? How easy it is to achieve the company goals? Process strategy of the Corporate, clear the following:

Capital composition: Capital Composition identified share of equipment, automation and labor used in the production process.

Process flexibility: the easy of a resource in response to changes in demand, technology, products or services will be adjusted.

Vertical integration: the extent to which a company is producing its required inputs, indicating vertically integrated organization.

Customer engagement: the role of the customer in the production process (Jafarnejad, 1387).

For being agile in process level, management should have the ability for design and reconfigure the component of process, and compose tasks and capabilities in response to environment. (Frats and Sharp, 2005). Operational agility in process level at business is defined as: the ability to add or reconfigure a business process with rapidly adding new capabilities to the collection to meet the needs of potential firms is defined as operational agility (Rask & David, 2005).

By studying agility literature, two core agile competences, ability to accept change and the response to it is introduced (Burgess, 1994; Sharifi and Zhang, 1999 Y.et al, 1999). Although the concept of business process agility is recognized by understanding the core competences, but there are other components. Therefore, agile business process is defined as a structure consisting of four elements: configurability, responsiveness, adaptability of employees, and a process-oriented perspective. The configurability and responsiveness contains the basic characteristics of agility while adaptability of employees and a process-oriented approach, including the ability to use the human dimension is related to processes (Rusk, 2010). One of the reasons why it can be effective to increase dramatically in response is removing bottlenecks of the work. For this reason, this item is studied as one of the most effective factor to implementing agile strategy.

Research Method

Implementing the processes of agile strategy is used in the cited organization is applicable. 2 variables topics namely parameters for implementing the agile strategy and organizational factors are investigated in this study. The variables of organizational factors as previously mentioned are divided into five categories: organizational structure, organizational strategy, organizational technology, and organizational culture and organizational processes. This research is descriptive- survey, therefore the method for collecting data is for testing the hypothesis is a questionnaire. It should be noted that this questionnaire is designed by researcher and composed of several standard questionnaires. The society of this study consisted of employees of the municipality, which includes 14 regions and 8 times totally 2101 patients took part in this research who had been vice president with Morgan Cochran formula. The following formula is used to determine the sample size.

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{z^2 pq}{d^2} - 1 \right)}$$

N=Size of society

Z=the standard normal probability

D=the maximum size of an optimal sampling error (the accuracy of this study, 0.05 is considered

n=Size of Sample

To determine the sample size, Morgan table selected and studied in the area between 2000 and 2200, The Cochran's formula was used to obtain a more accurate sample, and the numerical value obtained by both methods 325. The questionnaires were distributed in the spring and summer of 1392 in the municipality.

In the case of validity, content validity of the questionnaire has been used. For reliability of the questionnaire, Cronbach's alpha was used. By using SPSS software the Cronbach's alpha earned for the questionnaire 97.0%, respectively, which is very good to say the least.

Description results

Of the 325 patients, 117 were males and 204 were females, there were 4 people who did not answer the question. The age of 4.9% of them were below 25 years, 43.2% between 26 and 35 years of age, 32.7% between 36 and 45 years of age, 19.1% were in the age range 46 to 55 years. In terms of education, 14.2% of them had diploma degree, 8% had associate degree, 52.8% under graduate and 23.8% had a master's degree and 1.2% did not answer the question. The distribution frequency table for enterprise variable also implies that 40.1% of them were employees, 39.8% were expert, 13% of them were supervisors and nine quarters of them were senior expert. Finally, The distribution frequency table for work experience variable also suggests that 16.4% of employees had work experience less than 5 years old, 30.2% of them had 5 to 10 years working experience, 13.9% had between 11 to 15 years, 14.5% had between 16 to 20 years and 24.7% had more than 20 years of experience.

Descriptive statistics of organizational factors

Table1: Descriptive statistics Table organizational factors

Statistics	organizational factors
Mean	3.85
Standard deviation	0.57
Minimum	1.63
Maximum	5
Bias	-0.83
Standard deviation of bias	0.136
Strain	0.91
Strain SD	0.271

Organizational factors mean equal to 3.85 and standard deviation equal to 0.57. The lowest values among the scores were 1.63 and maximum score 5 have been reported. In comparison with the strain (0.91) and bias (-0.83) with twice the standard deviation of the normal distribution of data, it is confirmed that the distribution of strain is positive.

Investigate the normal distribution of data (Kolmogorov-Smirnov)

In order to study if distribution of a quantitative variable is normal, Kolmogorov-Smirnov (KS) test is used. In this test, the null hypothesis claims about the distribution of data (Azar & Momeni, 1386). In the present study, the normal distributions using the KS tests to be examined.

Table2: Table Kolmogorov-Smirnov

Variable	Mean	Standard deviation	Kolmogorov-Smirnov	Sig
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Organizational Structure	3.88	0.95	1.38	0.57
Organizational Strategy	3.79	0.72	1.34	0.54
Organizational technology	3.96	0.66	1.34	0.5
Organizational Culture	3.88	0.59	1.32	0.59
Organizational Process	3.77	0.72	1.45	0.6

As shown in Table 2, the results of this test indicate that all of the samples follow a normal distribution because sig 0.05 is bigger than significant amount.

The major hypothesis

Organizational factors effect on implementing the agility strategy in Isfahan municipality.

Table 3: The effect of organizational factors on implementing agility strategy

The mean value	sig	Degrees of freedom	The test statistic t
3.85	000.0	324	25.89

Comparison of significance level (Sig = 0) with a significance level of 0.05, indicating the null hypothesis (organizational factors have no effect on implementing agility strategy) will be rejected. So hypothesis of the study is confirmed.

Mean value equal to 3.85 indicate the high effect of organizational factors on implementing the agility strategy in Isfahan municipality.

The first sub-hypothesis

Organizational structure affects on implement the agility strategy in Isfahan municipality.

Table 4: The effect of organizational structure on implementing agility strategy

The mean value	sig	Degrees of freedom	The test statistic t
3.88	000.0	324	81.23

Comparison of significance level (Sig = 0) with a significance level of 0.05, indicating the null hypothesis (organizational structure have no effect on implementing agility strategy) will be rejected. So hypothesis of the study is confirmed.

Mean value equal to 3.88 indicate the high effect of organizational structure on implementing the agility strategy in Isfahan municipality.

The second sub-hypothesis

Organizational strategies affect on implement the agility strategy in Isfahan municipality.

Table5: The effect of organizational strategies on implementing agility strategy

The mean value	sig	Degrees of freedom	The test statistic t
79.3	000.0	324	19.72

Comparison of significance level (Sig = 0) with a significance level of 0.05, indicating the null hypothesis (organizational strategies have no effect on implementing agility strategy) will be rejected .So hypothesis of the study is confirmed.

Mean value equal to 3.79 indicate the high effect of organizational strategies on implementing the agility strategy in Isfahan municipality.

The third sub-hypothesis

Organizational technology effects on implementing the agility strategy in Isfahan municipality.

Table6: The effect of organizational technology on implementing agility strategy

The mean value	sig	Degrees of freedom	The test statistic t
95.3	000.0	324	25.44

Comparison of significance level (Sig = 0) with a significance level of 0.05, indicating the null hypothesis (organizational technology have no effect on implementing agility strategy) will be rejected .So hypothesis of the study is confirmed.

Mean value equal to 3.95 indicate the high effect of organizational technology on implementing the agility strategy in Isfahan municipality.

The fourth sub-hypothesis

Organizational culture effects on implementing the agility strategy in Isfahan municipality.

Table7: The effect of organizational culture on implementing agility strategy

The mean value	sig	Degrees of freedom	The test statistic t
85.3	000.0	324	25.18

Comparison of significance level (Sig = 0) with a significance level of 0.05, indicating the null hypothesis (organizational culture have no effect on implementing agility strategy) will be rejected .So hypothesis of the study is confirmed.

Mean value equal to 3.85 indicate the high effect of organizational culture on implementing the agility strategy in Isfahan municipality.

The fifth sub-hypothesis

Organizational processes effects on implementing the agility strategy in Isfahan municipality.

Table8: The effect of organizational processes on implementing agility strategy

The mean value	sig	Degrees of freedom	The test statistic t
76.3	000.0	324	18.56

Comparison of significance level (Sig = 0) with a significance level of 0.05, indicating the null hypothesis (organizational processes have no effect on implementing agility strategy) will be rejected .So hypothesis of the study is confirmed.

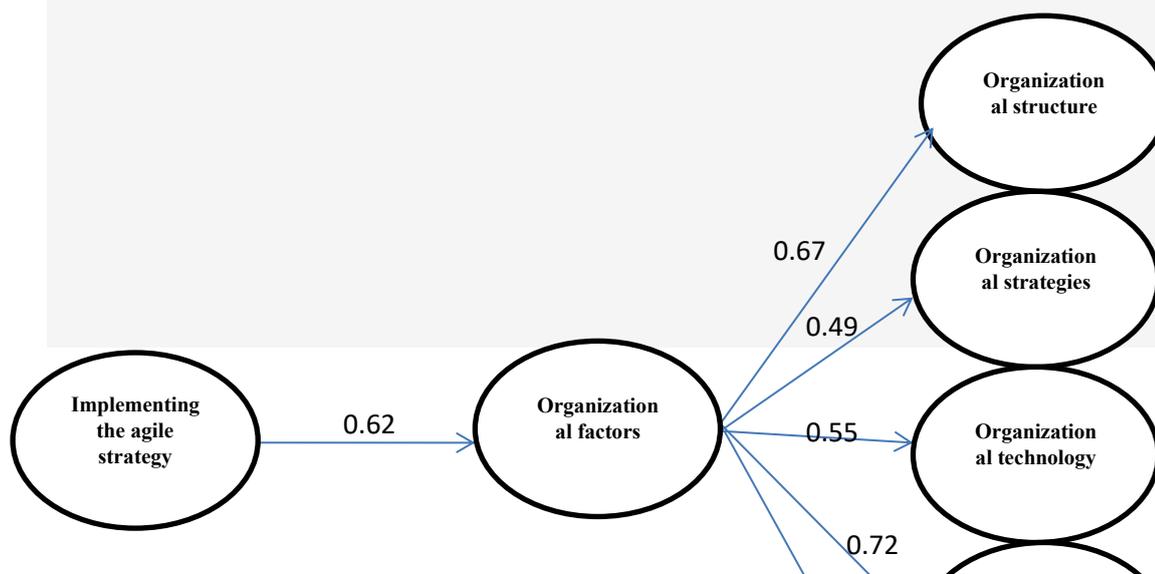
Mean value equal to 3.76 indicate the high effect of organizational processes on implementing the agility strategy in Isfahan municipality.

Correlation table

Table9: Correlation between effective factors for implementing agility strategy

Organizational process	Organizational culture	technology	strategy	structure		
0.69	0.63	0.58	0.57	1	Pearson correlation sig	Structure
0	0	0	0	-		
0.67	0.65	0.69	1	0.57	Pearson correlation sig	Strategy
0	0	0	-	0		
0.66	0.65	1	0.69	0.58	Pearson correlation sig	Technology
0	0	-	0	0		
0.7	1	0.65	0.65	0.63	Pearson correlation sig	Organizational culture
0	-	0	0	0		
1	0.7	0.66	0.67	0.68	Pearson correlation sig	Organizational process
-	0	0	0	0		

Structural modeling of operational factors to implementing the agility strategy in Isfahan Municipality



According to this model the impact of organizational factors to implementing the agility strategy is 0.62. Among these factors organizational culture is the parameter which has the greatest influence to implementing the agility strategy in Isfahan municipality.

The results of the research hypotheses

The premise of the question was: Do organizational factors effect on implementing the agility strategy in Isfahan municipality?

According to tables 3, 4,5,6,7 and 8 main hypotheses about the impact of organizational factors to implementing the agility strategy of the municipality of Isfahan was approved. Accordingly, organizational factors include organizational structure, strategy, technology, culture and organizational processes are effective in implementing agility strategies. This result is consistent with Branshyld results (2005) and Sherehiy and Karvsky (2007) and Sharifi and Zhang (1999). All of them confirmed the effect of organizational factors on the implementing the agility strategies. So the question was answered.

The results of the application of research findings

1. The organizational structure should be designed to be less hierarchical and bureaucratic with waste laws and procedures, organizational structure must have high flexibility similarly, and between the units of these organizations coordination must be established, also the route of information must be easily and quickly done.
2. Organizational strategies must be designed to have a clear vision; also the core competencies of the organization should be clear and understandable. All strategies should be in line with the needs of the organization. Strategies must be flexible and adaptable to changing needs. Also, transparency and coordination of the strategies at the time of the event could be managed well.
3. Organizational technologies to be simple and flexible to use in case of any changes, simply put it in a new direction for the organization, and quickly reconfigured to meet needs not miss. Moreover, the technology used is appropriate to the needs of the organization. Another point is the ease of use of the technology because applying the technologies that use of them is difficult, will met organization with the risk of dependence to the Special Forces and it can reduce the agility of organizations.
4. The culture of the organization should be based on mutual trust and respect for the leader and the employees. More energy must be used to create a shared culture and values. In organizations that are looking for agility, great efforts should be done to be established values such as a culture of teamwork, organizational learning culture, culture change, and

effective work culture and so on as a powerful ruler. These types of values only if it can help organizations to become more agile that able to penetrate the dominant culture and influence at all levels and sectors.

5. The worth- make processes that are the basis of the strategy should be identified at first. These processes should have the necessary coordination and flexibility conditions in response to changes. The organizational processes, aiming to use of the dynamic environment should be designed or redesigned. And furthermore in agile organizations all the bottlenecks in order to achieve the required speed should be identified and then eliminate.

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