



Identification of factors affecting on organizational agility and its impact on productivity

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ABSTRACT

The purpose of recent research is to investigate the relationship between agility capabilities and its impact on organizational productivity. The research method of study is descriptive and in terms of purpose, it is an applied study. The statistical population of the research includes 55 employees and managers selected in one of the private bank's Kermanshah province of Iran. The standard questionnaire of organizational agility were used to collect data. In the first part, a summary of the concepts of agility and productivity and in the second part of the study will be presented results obtained using the software Spss. The results of the study show that there is a significant and positive impact between agility capabilities and organizational productivity.

Key words:

Agility, Agility

Capabilities,

Productivity, Private

Bank

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Introduction

In the past two decades, globalization, shifting market environments, shifting consumer demands and quick technological developments have contributed to ambiguity and unpredictability in all sectors that have emphasized the importance to the power of a company to adapt to unanticipated changes, something that is considered to be vital to achieving and retaining a competitive advantage (Sud-on et al, 2014; Yaghoubi, 2010; Taleghani et al, 2014; Tseng, 2011). These reasons result in the fact that today, the manufacturing and services organizations work in the environment that the change is their main characteristics. The idea of adapting to unpredicted changes has led to the development of one of the newest concepts in organizational strategies and is called as the concept of agility (Alzoubi et al, 2011). Agility means the ability and skill to counter fast and timely to environmental changes and makes use provided opportunities (Sanadgol, 2014). Moreover, agility is the modern pattern of organizational structure in the 21st century and has become a successful approach for adapting to being rapid altering client requirements (Labaf & Bigdeli, 2015). Despite an escalating awareness that organizational agility is a key concept in dealing with this competitive pressure, the term "agility" is today often exaggerated by many organizations without rational seriousness. Agility is not simply achievable in practice. The management within an organization has to understand that the organization itself cannot be agile, but its human resources are often (Wendler, 2014). Furthermore, it ought to bear in mind that agility and achieving organizational agility are not a goal, but it is considered as a major factor in maintaining competitive position in the marketplace through inconstancy and changes (Dalvi, 2013). Organizational agility is one of the factors that influence organization efficiency. Productivity is to maximize apply of resources, employee and scientific measures to decrease costs and to the satisfaction of employees, managers and consumers (Khanmohammadi otaqsara et al, 2012). Productivity is one among the foremost extensively concepts used for measuring and controlling the efficiency of industry and the national economy. At the macro level, productivity shows how well an economy uses the resources in producing goods and services. Low productivity can lead to an economic slowdown and recession in the industry and business markets. Alternatively, improving productivity leads to a higher economic growth rate and higher living standards for a nation (Alhakmani, 2014). At the micro level, increasing productivity enables organizations and institutions to develop their global competition and growth, and improve their own cooperation. A low productivity shows that the organization is wasting its resources, and this can finally result in defeat of its international competition and thus reduction of its business activities (mohebbi et al, 2013). The outcome of this survey may be of vast help for the organizations in improving productivity. So, the purpose

of this paper is to check the concept of agility capabilities and the role it in achieving organization productivity.

Research objective:

Examining the relationship between agility capabilities and organization productivity.

Literature review

Agility, as an idea in production was devised by a group of researchers at Iaccoca Institute, Lehigh University in 1991 to explain the practices observed and thought of as crucial features of manufacturing during their examination (Yusuf et al, 1999). As the result of the research scientists concluded that company's production system must continually adapt to the changing business setting and needs, such as speed, flexibility, responsiveness and infrastructure, and to be able to rapidly redirect the production process (switch from one product model production for the other models of production) (Rimiene, 2011). Thus, agility is a business model that derived from flexible manufacturing structure (Christopher, 2001). On other hands, Productivity is the key in roughly all countries for increasing the quality of life. However, different outlooks exist among diverse groups in society. To some, it is a philosophy, to others it is a manner of life. However, to many it is a rehearsal of scientific management techniques. Depending on the perspective of people, the matter of productivity has provoked different responses and repercussion from organizational management (Mohanty, 1988). In the following paragraph, a brief review of studies of the relation between agility and productivity has been mentioned:

In a research done titled "The relationship between organizational agility and staff Productivity" (2015) Mohammadi concluded that there's a positive and significant relationship between agility structure and its sub variables with worker's productivity.

Sanadgol (2014) during a study titled "The survey of relationship between organizational agility and principal's job satisfaction" showed that dimensions of organizational agility have high correlations with job satisfaction.

Labaf and Bigdeli (2015) conducted a study to assess the impact of the Agility on job satisfaction and performance and expressed that organizational agility encompasses an important positive impact on efficiency and job satisfaction.

Mohebbi et al (2013) in a study titled "The impact of organizational factors on improving knowledge worker's productivity in Iran" state that organizational factors (like as: communication, training, incentive) have an impact on employee's efficiency.

Ebrahimpour et al (2012) investigated "The relationship between agility capabilities and organizational performance. The results showed that there is an important positive relationship between agility capabilities and performance of the company.

Abesi et al (2013) reported in his research that the each one the four dimensions of agility capabilities, three of

them could have a significant positive impact on the self-made performance of the national production.

Hypothesis

Main hypothesis

H0. There is significant and positive relationship between agility capabilities and productivity.

Sub hypothesis

H1. There is significant and positive relationship between responsiveness and productivity.

H2. There is significant and positive relationship between flexibility and productivity.

H3. There is significant and positive relationship between competency and productivity.

H4. There is significant and positive relationship between speed and productivity.

H5. There is significant and positive relationship between Human Capital and productivity.

The Concept of Agility

In recent years, agility has become a popular concept in the literature of management and organization. Yet there is no clear definition of agility. Dove was one of the first to talk about agility measurement as the ability of a process to respond to unexpected change (dove, 2002). Kumar and Motwani assert that agility refers to an organizations ability to speed up the activities on the critical path, and is, therefore, represents the organization's competitive advantage (kumar & motwani, 1995; arteta & giachetti, 2004). Raschke and david claim that agility is the ability to actively modify and/or rearrange a business process choosing from a set of business process capabilities to Reconcile required and possible needs of the organization (raschke & david, 2005). Sharifi and Zhang (1999) believe that organizational agility means the ability of feeling, understanding and forecasting changes in the work environment.

Agility capabilities

Institutions and agile organizations are concerned change, uncertainty and unpredictable in their work environment. Thus, the organization for dealing with change, uncertainty and lack of predictability need to a number of unique features. These features include four main parts which are considered as the basis for maintaining and developing agility:

1. Responsiveness: is the ability to recognize and respond rapidly to changes which include the following: feel, understand and forecast changes, fast and immediate reaction to change; creation, amendment and improvement change.

2. Flexibility: is the ability to produce and deliver products and diverse services and meet the different goals with the same resources and equipment. Flexibility is considered in the following four areas: flexibility in production volume, flexibility in shape and Product Model, flexibility in human resources.

3. Speed: is the ability to do Activities in the shortest possible time, which was to include the following: Quickly launch new products and services to marketplace,

carry out functions quickly in a short time quick and timely delivery of goods and services.

4. Competency: refers to broad range of capabilities that make sure the efficiency of activities in to achieve organizational goals. These factors include the following: having a strategic view, right technology hardware and software, Quality products and services, cost effectiveness, the introduction of new products with increasing rate, change management, qualified people, capable and knowledgeable, the effectiveness and efficiency of operations, Internal and external collaboration, Integrating Activities (sharifi & zhang, 1999).

5. Human Capital: In the modern era, human capital is the most valuable and greatest asset of any organization and country. Human capital is the only factor that can change itself and at the same time transform other production inputs, Provides a basis for innovation and leads to economic growth. Among the theories that have a high value for humans in the organization, is the theory of "human capital". The basic idea of human capital theory is based on the idea that investing in human resources will increase the production capacity of individuals and ultimately improve economic growth.(hasanpour & labadi, 2016)

The Concept of productivity

Productivity is a phenomenon that has grown in recent decades and its use has become commonplace in the scientific and cultural circles. Nowadays in all countries developed or developing, productivity has become a national priority. The continued existence of countries that only have human resources; largely depends on the ability of continuous production and maximum possible output per unit of input (tabidian & shahverdi, 2014). Robins believes that a productive organization is one that achieves its objectives as soon as possible and with the least cost (mohebbi et al, 2013). The European Productivity Agency (1985) has defined productivity as the extent to which each production factor is effectively employed. In economic science, productivity include: effective and efficient use of Available sources in the manufacture process, so that the economy of a society to achieve its maximum performance potential. Japan Productivity Center defines productivity as to maximize the use of resources, manpower and equipment to the scientific method and reduced production costs (costs of providing services), expand markets, increase employment, attempt to augment real wages and improved standards of living, So that is to the benefit of workers, management and public consumers(tabidian & shahverdi, 2014).

Factors Affecting Productivity in an Organization

Effective factors in productivity of public organizations can be divided into two categories: External and Internal organizational factors.

External organizational factors: The most important External Organizational Factors are as follows:

1. Cultural factors
2. Economic factors

3. Social factors

Internal organizational factors: The most important internal Organizational Factors are as follows:

1. Human resources
2. Organization's environment
3. Salary
4. Employee training

5. Technology

6. Rewards
7. Organization culture
8. Quality of Work Life
9. Management style and method (tabidian & shahverdi, 2014).

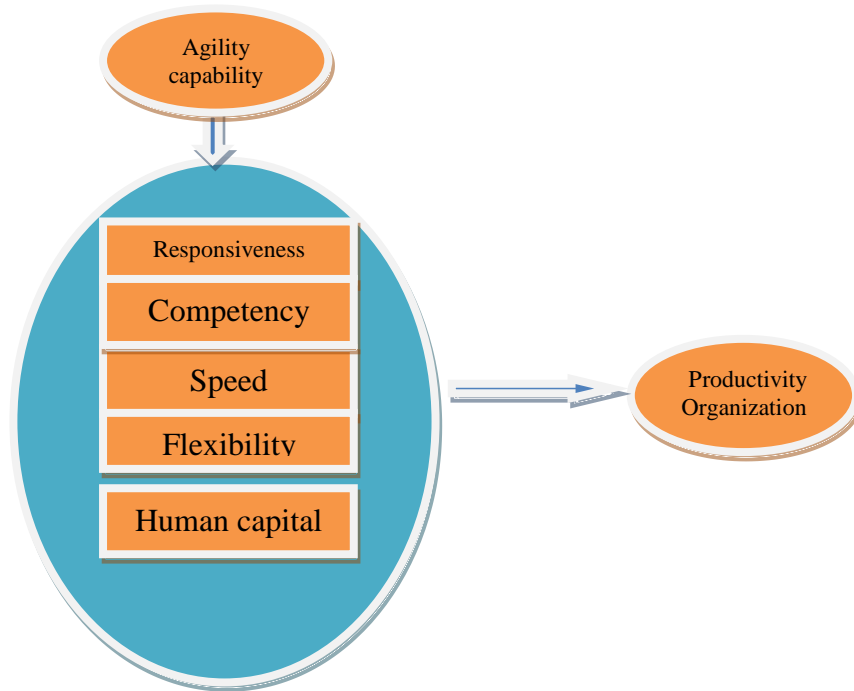


Fig. 1. Conceptual Model Research

Materials and Methods

Accordingly, the present study "applied" in terms of objective and in terms of the method of data collection is "descriptive". The statistical population of the research was 55 employees and managers one of the private bank's Kermanshah province of Iran. To determine the sample

size from the statistical population of the study, the mentioned volume was put into the Cochran formula and determined with a confidence level of 95% of the sample size and its results are as follows:

$$N = 64, p = 0.5, t = 1.96, d = 0.05, q = 0.5 :$$

$$n = \frac{Nt^2 pq}{Nd^2 + t^2 pq}$$

$$n = \frac{64 \times (1.96)^2 \times 0.5 \times 0.5}{64 \times (0.05)^2 + (1.96)^2 \times 0.5 \times 0.5} = 54.98 \cong 55$$

Research finding

Descriptive Statistics

Table 1 presents descriptive statistics of the study including demographics.

Tabel. 1. descriptive statistics

Variable		Frequency	Percentage
Gender	Male	55	100
	Femal	0	0
	Total	55	100

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Age	25-35	6	10/9
	35-45	37	67/2
	Over 45	12	21/8
	Total	55	100
Education	Diploma	19	34/5
	Bachelors	30	54
	Master	6	10/9
	Total	55	100
Position	manager	13	23.6
	Vicechancellor	11	20
	Employee	31	56/3
	Total	55	100

Inferential statistics

Multiple regression is used to test the hypotheses, the results of which are provided below:

Table. 2. Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Speed, Responsiveness, Flexibility, Competency, HumanCapital ^b	.	Enter

a. Dependent Variable: Productivity

b. All requested variables entered.

Table. 3. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.857 ^a	.735	.708	.50476

a. Predictors: (Constant), Speed, Responsiveness, Flexibility, Competency, Human Capital

b. Dependent Variable: Productivity

Table .4. ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	34.557	5	6.911	27.127	.000 ^b
Residual	12.484	49	.255		
Total	47.041	54			

a. Dependent Variable: Productivity

b. Predictors: (Constant), Speed, Responsiveness, Flexibility, Competency, Human Capital

Table 5. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.241	.408		-.591	.557
HumanCapital	.353	.104	.362	3.403	.001
Flexibility	.335	.125	.334	2.670	.010
Competency	.154	.075	.204	2.064	.044
Responsiveness	.185	.074	.186	2.482	.017
Speed	.109	.052	.166	2.090	.042

a. Dependent Variable: Productivity

multiple regression was conducted to determine whether responsiveness, flexibility, competence, speed, and human capital significantly predicted productivity on the organization.

The results showed that the five variables of Responsiveness, flexibility, competence, speed and human capital (Agility Capabilities) predict %71 of organizational productivity variance and the fitted regression model is appropriate. ($p < 0.001$)

When the variables were examined to determine the participation of each of them in the model, it was found that; Human capital ($\beta = 0.362, p = 0.001$), Flexibility ($\beta = 0.334, p = 0.010$), Competence ($\beta = 0.204, p = 0.044$), Responsiveness ($\beta = 0.186, p = 0.017$), and Speed ($\beta = 0.166, p = 0.042$).

Based on the results, A standard deviation in the human capital indicator increases the organization's productivity

by 0.362. On the contrary, reducing a standard deviation in the human capital indicator reduces to 0.362 standard deviations in the productivity variable of the organization. Hence, %36 of the variability in the variable (productivity of the organization) by human capital, %33 by flexibility, %20 by Competence, %18 by Responsiveness, and finally by %16 by speed. Therefore, variables create meaningful partnerships in the model and predict the productivity of the organization.

Conclusion

Generally, this study has shown that agility capabilities have significant and positive effect upon the organization productivity. According to the results of questionnaire, it is observed that in issue of organizational agility, the first priority is with human resource that it has the greatest impact on productivity. So that managers should be careful when recruiting employee and have more time to spend it.

And after employing the staff, because human resources are the most important element of an organization in achieving its goals, managers should not neglect the training, maintenance; supply the needs of employees and other items that enhance the quality of employees' work and life. So managers should spend more time for planning, directing and controlling the activities in order to boost productivity. Research results Labaf and Bigdeli(2015), Gholami and Eskandari(2014), Sanadgol(2014), Abesi et al(2013), Alhakmani and Bashir(2014), Dalvi et al(2013), Ebrahimpour et al(2012) are expressed in confirmation of research results.

Discussion

One of the key factors that will make sure that organizational success is its capacity building agility. In today's competitive world, a company that wants to succeed; must create an organization fast, smart and superior. An organization with the specifications mentioned, needs to features that can react quickly to changes in demand, the ability to communicate with customers and suppliers and most importantly create of efficient employee, and this is not possible except in the agility of the company. Managers need to know how these features can be turned on coordinated measures that serve to increase the efficiency of the corporate. High productivity is the main source of economic growth and development. Limitation of available resources, population growth and human needs has led to the stakeholder economic sphere, policy and community management and organization, increase efficiency in their priority programs. Although there are diverse solutions like on re-engineering, total quality management, virtual organizations and networking, but the most optimal solution is organizational agility. So managers should spend more time for planning, directing and controlling the activities in order to agility and boost productivity.

Research limitations

1. Unwillingness of some staff to respond to the questionnaires.
2. Conservative environments in offices that may have influenced responses to the questionnaires.
3. The effect of personal biases and interests of research participants on research results.
4. Some managers of different bank branches did not participate in this study.

REFERENCES

[1] Abesi, A., Mohammadi, M., Shafieepur, D (2013). The role of Organizational agility capabilities in the successful performance of the national production. *World of Sciences Journal*, (3), 17-32.

[2] Al hakmani, K, & Bashir, H (2014). Investigation into Issues Related to the Productivity of Employees in an Oil and Gas Industry. *Proceedings of the 2014 International Conference on Industrial Engineering and Operations Management Bali, Indonesia*.

[3] Alzoubi, A. E. H., Al-otoum, F. J, & Albatainh, A. K. F (2011). Factors associated affecting organization agility

on product development. *International Journal of Research and Reviews in Applied Sciences*, 9(3), 503-516.

- [4] Arteta, B. M., & Giachetti, R. E. (2004). A measure of agility as the complexity of the enterprise system. *Robotics and computer-integrated manufacturing*, 20(6), 495-503.
- [5] Christopher, M., & Towill, D. (2001). An integrated model for the design of agile supply chains. *International Journal of Physical Distribution & Logistics Management*, 31(4), 235-246.
- [6] Dalvi, M. R., Shekarchizadeh, A. R., & Bagsorkhi, G. R (2013). Investigating of organizational agility componenets(cultural leadership,organizational change and customer services) on the organizational performance based on the satellite model(Snowa company as a case study).1-14 Available online@www.gjpast.com
- [7] Dove, R. (2002). *Response ability: the language, structure, and culture of the agile enterprise*. John Wiley & Sons.
- [8] Ebrahimpour, H. Salarifar, M. Asiaei, A (2012). The Relationship between Agility Capabilities and Organizational Performance: a Case Study among Home Appliance Factories in Iran. *European Journal of Business and Management*, 4(17), 186-195.
- [9] Hasanpour, M. Labadi, Z(2016). The Importance of Human Capital in the Third Millennium. *Journal of Research in Psychology and Education*, 2(7), 45-66.
- [10] khanmohammadiotaqsara, M., khalili, M. & mohseni, A (2012). The Role of Practical Training in Productivity and Profitability of Organizations in the Third Millennium. *Procedia-Social and Behavioral Sciences*, (47), 1970-1975.
- [11] Kumar, A., & Motwani, J. (1995). A methodology for assessing time-based competitive advantage of manufacturing firms. *International Journal of Operations & Production Management*, 15(2), 36-53.
- [12] Labaf, H. & Bigdelli, E (2015). The Impact of Organizational Agility on Efficiency and Job Satisfaction. *Journal UMP Social Sciences and Technology Management*, 3(3), 153-160.
- [13] Mohammadi, M., Nikpour, A., & Chamanifard, R. The Relationship between Organizational Agility and Employee's Productivity (Case Study: Ministry of Youth Affairs and Sports, Iran).
- [14] Mohanty, R. P (1988). Factors affecting productivity: perceptions of Indian managers. *Industrial Management & Data Systems*, 88(7/8), 21-26.

- [15] Mohebbi, M., Shakibaefar, A., Alamdari, A., & Alamdari, M (2013). The Impact of Organizational Factors on Improving Knowledge Workers' Productivity in Iran. *International Journal of Research in Organizational Behaviour and Human Resource Management*, 1(3), 13-31.
- [16] Raschke, R. L., & David, J. S. (2005). Business process agility. *AMCIS 2005 Proceedings*, 180.
- [17] Rimiené, K. (2011). Supply chain agility concept evolution (1990-2010). *Economics & Management*, 16.
- [18] Sanadgol, M (2014). The Survey of Relationship between Organizational Agility and Principals Job Satisfaction. *International Journal of Basic Sciences & Applied Research*, (3), 317-319.
- [19] Sharifi, H., & Zhang, Z. (1999). A methodology for achieving agility in manufacturing organisations: An introduction. *International journal of production economics*, 62(1), 7-22.
- [20] Sud-on, P. Abareshi, A. Pittayachawan S. (2014). Agility Enablers, Capabilities and Performance conference paper.
<http://www.researchgate.net/publication/272793776>.
- [21] Tabidan, S., Shahverdi. (2014). Increasing productivity and efficiency of staff. (In persian)
- [22] Taleghani, Gh. Amirkhani, AH. Froughi, H (2014). Identify and prioritize the factors affecting the implementation of agile manufacturing (Case Study: Khui Sugar Factory) *.Journal of Novel Applied Sciences*, 3(10), 1122-1124.
- [23] Tseng, Y. H. & Lin, C. T (2011). Enhancing enterprise agility by deploying agile drivers, capabilities and providers. *Information Sciences*, 181 (17), 3693-3708.
- [24] Wendler, R (2014). Development of the organizational agility maturity model. In *Computer Science and Information Systems (FedCSIS), 2014 Federated Conference on* (1197-1206). IEEE.
- [25] Yaghoubi, N. M., & Dahmardeh, M. R. (2010). Analytical approach to effective factors on organizational agility. *Journal of basic and applied scientific research*, 1(1), 76-87.
- [26] Yusuf, Y. Y., Sarhadi, M. & Gunasekaran, A (1999). Agile manufacturing: The drivers, concepts and attributes. *International Journal of production economics*, 62(1), 33-43.