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# The Effect of the Adoption of Information Technology on Organizational Agility with Regard to the Role of Outsourcing Activities (Case Study: Service Selected Companies in the City of Qom)

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**Abstract:** Organizations always solutions and new strategies seek to develop and increase its competitive advantage. Outsourcing (Outsourcing) is one of the strategies that the probing reduce and control operating costs through leveraging the expertise of specialists in the organization to focus on core competencies of the organization, improve the quality of goods and services, organizational agility, productivity and leads to greater competition. The aim of this study was to evaluate the impact of the adoption of information technology outsourcing and organizational agility. This descriptive study was conducted. Statistical research, service selected companies of Qom are 400 members are chosen randomly selected sample. A sample of sample is taken. The results showed that outsourcing has a positive and significant relationship with the four dimensions of organizational agility.

**Key words:** Outsourcing, agility, adoption of information technology and service selected companies goods and services, organizational agility, Iran

### INTRODUCTION

The increasing speed of technological change on the one hand and changing nature of consumer demand and increased competition between organizations on the other hand has led organizations to aggressively seek new competitive advantages over rivals and better meet the needs of the customer. In this case, it seems that the movement towards the establishment of organizations which are speed and flexibility in response to changing environments, unstable and unpredictable new solution is vital. Achievement of such targets in light of new concept called "organizational agility" is obtained. In the complex world of enterprise, factors and elements of clear organization and doing something about it is not too difficult. If managers and practitioners to remedy to the identified bottlenecks and go straight result can be achieved. Many times we hear everything is in place to set and raw materials is enough, technology is good but do not go according to the plan set. At such times we need to ask ourselves whether the combination of the factors mentioned is good? Do people have problems? The organization can bring everything under the rule of law and uniform mechanical because man is the creativity that affects all organizational factors. Design outsourcing or internal security activity is considered one of the most complex organizational decisions. Making this decision as the 1st part of the outsourcing process involves identifying all the factors involved. Outsourcing benefits

and barriers on the one hand and the risk on the other hand comprehensive and thorough investigation of this decision inevitable (Teo *et al.*, 2009).

The need for IT issues, agility and outsourcing will be multiplied when the check weaknesses, strengths, threats and opportunities facing firms in order to promote and develop scientific and practical, productive members identify consumer markets products as well as knowledge of competitors at the national level.

#### Theoretical foundations

Organizational agility: Agility is really a fundamental capabilities the company requires that changes in the business environment, feel, receive, consider, analyze and predict. states that the agility of a firm's ability to survive and thrive in a competitive environment where change is continuous and unforeseen And respond quickly to rapid market changes resulting from the valuation of the customer on goods and services. And where other means capable of reshaping operations, processes and business relationships effectively while at the same time to successfully operate in an environment of constant change. Business agility is a vast potential organizational structures, information systems, support processes and particularly the opinion of covers. Agility as a production philosophy (next generation production systems) to companies that compete in all economic sectors, greet as "Joseph" said 92 year agility only by the hierarchy of the integrity of customer's needs within a framework of

internal and external environment of the organization. This is due to having a holistic view of the enterprise advanced production technology along with the internal capabilities of their processing and through the use technology/information systems can be achieved. Goldman also defines it: Comprehensive strategic response to major changes and is impossible to ignore the competitive system dominant in the global economy 1st trade occurs Finally he and his colleagues have defined it as follows: Find succeed in the competitive principles (speed, flexibility, creativity for pre-operative, quality, profitability) Through the integration of resources that are reshaping the practical and best practices in a specialized environment In order to provide services and products in an environment based on customer demands and market changes are happening fast.

Outsourcing: Although, the use of the word outsourcing in service selected companies do not have much experience but Moore is not new and has been used a lot. It seems that the assignment of tax collection activities to contractors in Roman times was the 1st form of outsourcing. In the eighteenth and nineteenth century in England streetlight maintenance, prison administration and tax collection activities has been assigned to contractors. At about this time in America and Australia and in the French postal service delivery and management of rail lines and distribution of water resources is outsourced. So it can be concluded before and during the industrial revolution, a variety of outsourcing is executed (Cheshmberah and Mortezavi, 1966). Although, the term outsourcing for the 1st time in 1989 to explain the company's decision to divest the IT activities to a subsidiary of IBM was used as a business strategy. In today's competitive world, organizations that operate one or two key capabilities are important in business By buying services and outsourcing do In such a structure codified set of businesses, each with their key capabilities are known In the win-win relationships together in a network of fall and ultimately, consumers (and not all interest groups).

These networks interact with each other to create synergy that will benefit more than ever. In many cases outsourcing companies and government agencies impact on people, processes, methods and tools in a word structures and behaviors as they do not consider their actions to outsource their activities outsourcing done without analyzing the problems mentioned above, increases operational risk outsourcing projects and in some cases may become a major disaster to avoid the consequences and problems that have arisen. Even the

need to return to past processes and practices to compensate for losses incurred and the cost of many companies impose (Elango, 2008).

Adoption of information technology: Among the various patterns that IT researchers to explain or predict the motivational factors (Which is used in technology adoption by users) have used, can be used in TAM (TAM). Is perhaps one of the most versatile model in this regard, noted. According to this model, based believed that the perception of the technology, the technology will affect their attitude (Lee and Kim, 2009). This model suggests that the use of ICT with the desire to behavior (desire to use) determined that this behavioral tendency. The perception is determined based on 1st, the perception of the usefulness of the degree to which a person believes Using a particular technology will improve his performance and Second, perceived ease of use is the degree to which a person believes the technology will be easy for him.

TAM is a model which stipulates that relies on the willingness willingness to accept a technology for actual use of the technology is a good predictor (Hong et al., 2006). And can be based on user behavior prior to the use of ICT as predicted. Willing to accept, mental attitude of a person to perform a specific behavior is an important factor in the behavior of the real Kuo (Bahrami, 2009). This model, known as the Theory of Reasoned Action (TRT) as a framework for predicting and explaining howhuman behavior is considered is derived. Theory of reasoned action, causal relationships in which the movement of beliefs, attitudes and behavioral tendencies specifies. TAM which is a modification of the theory of reasoned action. To predict the adoption of ICT by replacing the variables determining or beliefs theory of reasoned action with two key components perceived usefulness and perceived ease of use is used. In addition, TAM, perceived ease of use, directly on the subjective perception of the usefulness of affect. That both are effective in the adoption of ICT. The external variables that directly affect the perceived usefulness and ease of use, may be an important factor in technology adoption model that includes the characteristics of ICT, personal characteristics and environmental variables is 4 (Lee and Kim, 2009; Kang et al., 2009). It seems the iconic model, the accepted view among scientists of information systems for the study of behavior in the field of information and communication technologies is user acceptance one of the most significant weaknesses of Technology Acceptance Model is that in this model, social factors have an important role in people's attitudes to technology adoption. Have not been considered. In order to solve this problem, the technology acceptance revised model, theoretical constructs such as social impact processes such as anxiety, Voluntary and image recognition tool as well as processes such as product quality, visibility and importance of outcomes jobs have been added to the original model.

#### MATERIALS AND METHODS

This research method in terms of practical purpose and the nature of descriptive and correlational. Because The present study was conducted to describe the existing object can be in one research study was descriptive. In descriptive studies, regardless of just how the quality and quantity of cases and events data to be mean while researcher correlation with the presence or absence of data to determine associations between variables.

In this study, the researchers sought to explore the relationship between Since outsourcing, organizational agility and acceptance of information technology research method is correlation. The study population consisted of employees of service selected companies. It is not necessary to study a subject observed and evaluated all of society. But in most cases it is sufficient detail view. In other words, most of the studies, the researchers will do sampling. In this study, random sampling is used. The data collected in this three-part questionnaire with 21 questions questionnaire information technology acceptance, agility questionnaire with 12 questions and outsourcing questionnaire with 22 questions. IT compliance Questionnaire four dimensions of perceived usefulness (questions 1-6) perceived ease (question 7-12)

attitude toward using (questions 13 and 17) and tend to use (questions 18 and 21). The questionnaire is designed organizational agility in 4 dimensions and 12 questions. Speeds (Question 10, 11 and 12) flexibility (7, 8 and 9) competency (Questions 4, 5 and 6) and the answer (questions 1, 2 and 3). The questionnaire has 22 questions all the outsourcing outsourcing organization are measured.

#### RESULTS AND DISCUSSION

Descriptive analysis findings 65% male and 35% are women. About 16.2% of people under the age of 30 year, 38.5% between 30-35 year, 18.5 and 26.9% between 35-40 year are over 40 year old. Approximately 406% of associate degree, 47.7% of undergraduate, postgraduate and 40.8% of doctoral degree are 6.2 people. Job Title 75% of experts, 14% of Head, 8% and 3% of managers had been deputy.

Average test organizational agility: Due to the significant level of t-obtained coefficient conclude the null hypothesis is rejected and mean production of knowledge is not equal to 3. Since the upper limit and lower limit as a negative number as well as a negative number we conclude structure mean potential of the test, the number 3 is less (Table 1 and 2).

**Posts outsourcing test:** Due to the significance level and conclude coefficient obtained t. The null hypothesis is accepted and mean IT potential is equal to 3 or in other words the amount of 3 no difference (Table 3 and 4).

Table 1: One-sa	mple statistics b	y organizational agility					
Variable		N		Mean		SD	SE mean
Agility		130		2.7246		0.74345	0.06521
Table 2: One-sa	mple test of agil	ity					
						95% Confi	dence interval of the difference
Variable	t-value	df	Sig. (2-tailed)		Mean difference	Lower	Upper
Agility	-4.223	129	0.000		-0.27538	-0.4044	-0.1464
	mple statistics o	f post outsourcing		3.6		GD.	GE
Variable		N		Mean		SD	SE mean
Outsourcing		130		3.0338		0.69422	0.06089
Table 4: One-sa	mple test of outs	ourcing					
						95% Confi	dence interval of the difference
Variable	t-value	df	Sig. (2-tailed)		Mean difference	Lower	Upper
Outsourcing	0.556	129	0.579		0.03385	-0.0866	0.1543
Table 5: One-sa	mple statistics o	f information technology					
Variable	-	N		Mean		SD	SE mean
Adoption of inf	ormation technol	ogy 130		1.2349		0.28505	0.02500

Table 6: One-sample test of average adoption

					95% Confidence interval of the difference	
Variable	t-value	df	Sig. (2-tailed)	Mean difference	Lower	Upper
Adoption of information technology	-70.603	129	0.000	-1.76513	-1.8146	-1.7157

t-value = 3

Correlation b/w outsourci	no and nositive re	elationshin

Vaiables	Speed	Flexibility	Responsiveness	Merit
Pearson correlation	0.673	0.793	0.649	0.289
Outsourcing Sig.	0.000	0.000	0.000	0.016
N	130	130	130	130

Table 8: Test sample correlation adoption

Vaiables	Speed	Flexibility	Responsiveness	Merit	
Pearson correlation	0.158	-0.053	-0.099	-0.056	
Outsourcing Sig. (2-tailed)	0.137	0.618	0.352	0.597	
N	130	130	130	130	

Table 9: Teset results of correlation b/w perceived

Vaiables	Speed	Flexibility	Responsiveness	Merit
Per ceived usefulness				
Pearson correlation	0.288	0.203	0.049	0.112
Perceived usefulness Sig. (2-tailed)	0.015	0.090	0.684	0.355
N	130	130	130	130
Perceived ease				
Pearson correlation	0.270	0.096	0.073	0.078
Perceived ease Sig. (2-tailed)	0.023	0.426	0.546	0.520
N	130	130	130	130
Attitude toward using				
Pearson correlation	0.101	0.061	0.008	0.029
Attitude toward using Sig. (2-tailed)	0.404	0.612	0.949	0.812
N	130	130	130	130
Ease of use				
Pearson correlation	0.337	0.067	0.243	0.163
Ease of use Sig. (2-tailed)	0.004	0.583	0.043	0.177
N	130	130	130	130

Average test adoption of information technology: Due to the significant level of T-obtained coefficient conclude the null hypothesis is rejected and mean adoption of information technology  $\neq$  3. Since the upper limit and lower limit as a negative number as well as a negative number, It follows the adoption of information technology mean test value is less than the number 3 (Table 5 and 6).

**Correlation dimension organizational agility with outsourcing:** Test results showed a correlation between outsourcing and there is a significant positive relationship between the 4 dimensions of organizational agility. Most of the outsourcing relationship between the speed of organizational agility with which its value is 0.673 (Table 7).

Correlation adoption of information technology by outsourcing: Test results showed that the correlation between any of the organizational agility by outsourcing relationship is not significant (Table 8).

Correlation with dimensions of organizational agility adoption of information technology: Test results showed a correlation between the perceived usefulness of the information technology acceptance After the 0.288 the speed of organizational agility and significant positive association has been observed, After the 0.270 the speed and ease of understanding the connection is obtained. The dimensions of the application were not observed with any of the organizational agility. In terms of ease of use, among this after the adoption of information technology by both the speed and responsiveness positive and significant relationship was observed (Table 9).

# CONCLUSION

In recent years, environmental issues such as acceleration of changes, uncertainty about the future, rising costs, immensely large organizations As well as legal restrictions have caused organizations to rethink their thought pattern. them to achieve a competitive advantage in today's world of business to turn new

strategy. The rapid growth of technology, increasing the speed of changes in commodity markets, competitors and expand the boundaries of the corporate market without borders has led to organizations, organizations with a flexible structure and extensive supply network, organizations that are able to adapt to a changing environment. And require easy and fast access to needed resources such as specialized staff, technical knowledge and advanced technology outside the organization. What's in this article were examined Its 3 components outsourcing, IT agility and acceptance of the results confirmed the relationship between some of the components together.

## RECOMMENDATIONS

It is recommended for future studies of other models for organizational agility and adoption of information technology used Structural equation modeling and statistical methods used to evaluate the impact of these components on each other.

#### REFERENCES

- Bahrami, B., 2009. A look at outsourcing offshore. Competitiveness Rev. Intl. Bus. J., 19: 212-223.
- Cheshmberah, M. and M. Mortezavi, 1966. The Effective Outsourcing Management. Mehraban Publication, Tehran, Iran.
- Elango, B., 2008. Using outsourcing for strategic competitiveness in small and medium-sized firms. Competitiveness Rev. Intl. Bus. J., 18: 322-332.
- Hong, S., J.Y. Thong and K.Y. Tam, 2006. Understanding continued information technology usage behavior: A comparison of 3 models in the context of mobile internet. Decis. Support Syst., 42: 1819-1834.
- Kang, Y.S., S. Hong and H. Lee, 2009. Exploring continued online service usage behavior: The roles of self-image congruity and regret. Comput. Hum. Behav., 25: 111-122.
- Lee, S. and B.G. Kim, 2009. Factors affecting the usage of intranet: A confirmatory study. Comput. Hum. Behav., 25: 191-201.
- Teo, T.S.H., S. Lin and K.H. Lai, 2009. Adopters and non-adopters of e-procurement in Singapore: An empirical study. Omega, 37: 972-987.