European Online Journal of Natural and Social Sciences 2013;
vol.2, No.3 (s), pp. 1658-1664 ISSN 1805-3602

The relationship between information technology and organizational success of Yazd executive systems

Mohammad Hosein Salmanroghani[1], Shima Omidvar Abarghooie[2]

[1]Department of Architecture, Taft Branch, Islamic Azad University, Taft, Iran; 2Department of Management, Taft Branch, Islamic Azad University, Taft, Iran

Abstract

This research aimed to identify and describe the relationship between information technology use and organizational success in Yazd executive systems. According to this method, it is a descriptive correlation which is the purpose of the application. The population included all managers and executive assistants of executive systems in Yazd devices that were approximately 152 patients. Because of statistical society limitation, sample size was considered equal to statistical society. The instruments used for collecting data in this research include two questionnaires of information technology and organizational success. Questionnaire validity and reliability of Information Technology were considered 0/975 and 0/963 and of organizational success were considered 0/935 and 0/909, respectively. For data analysis, Pearson and Spearman correlation coefficients between the Significant 05/0 ≤ P was applied. All statistical analysis was done by computer and SPSS software. The results showed that there is a direct and positive relationship between IT and success organization. Dimensions of information technology include: Transaction Processing System, Management Information Systems, Executive Support System, Knowledge Workers System, Office Automation Systems, hardware and Decision Support System. Dimensions of organization success include: speed, innovation, solidarity and flexibility. The results recommended that organizations particularly do investment on IT which has been approved as a factor influencing organizational success. Organizations provide the necessary infrastructure to apply different forms of information technology.

Keywords: Information technology, Transaction Processing System, Office Automation System, organizational success

Introduction

All organizations use technology toward accessing its goals. Organizations with better turnover have more emphasis on employment of technology to have a strategic effect on trade. Long term program for employment of technology has the goal of competitive preference presentation; technologies that can help the organization to evaluate the effectiveness of trade (Harpist, 2006). Companies with better turnover have different view on technology and reshuffles from other companies. They avoid temporal methods and technologic explosions, but they are outdistancing in technologies that they have chosen carefully. These companies identify the technology as their motivating agent not creating agent. They utilize technologies that have direct relationship with their hedgehog concept. They never use the technology as their reshuffle agent (kalinz, 2001). It is said that information technology increases the organizational power. Romar in his theorem "economy modern growth" tells that economy growth factors are not capital, and there are human force and rare materials but modern knowledge and thoughts will lead to economic efflorescence and the country's capital is a function of science and religions (www.vista.ir).

Advances in electronics, telecommunication and computer technologies in recent years and merger and emergence of computer huge networks had changed attitudes toward 'Information Technology' instead of 'Information'. Creating informa-

Corresponding author: Mohammad Hosein Salmanroghani, Department of Architecture, Taft Branch, Islamic Azad University, Taft, Iran. E-mail: hoseinsalman@taftiau.ac.ir

tion bases that comes from information technology, simplifies the complicated internal organizational processes and creates organizational networks by connecting them to each other. Managers' intermediate viewpoint has changed to long term and they have an immediate access to corresponding data for decision making (Sarafizadeh & Alipanahi, 2002).

Statement of problem

Organizational success is achieving a goal that the organization has considered it and the organization achieves credibility trough obtaining it. So, organizations always want to succeed in their tasks (Hadavi, 2009).

It seems organizations do not succeed and can't obtain their goals or set new objectives for themselves, if they would finally be defeated by other organizations. In governmental viewpoint, if an organization does not succeed, it will surely have negative influence on other organizations.

Information technology is defined as a set of computer systems used in an organization but in more precise definitions which refers to technologic sight of information system and consists of hardware, software, databases, networks and other electronic equipments. We can count information technology as a subordinate mechanism of an information system. However, information technology and information systems are sometimes used equivalently (Sarafizadeh, 2010). Dimensions of IT include: Transaction Processing System, Management Information Systems, Executive Support System, Knowledge Workers System, Office Automation Systems, hardware and Decision Support System (Seidjavadin, 2009).

Avoiding information technology can harm organizational success (Sarafizade & Alipanahi, 2009). In global competitive environment, prosperity of information systems is a key factor in organizational success (Tarahzadegan, 2010). So, in this study, the author is intended to answer the following questions:

1) Is there any relationship between information technology and organization success in Yazd executive systems?

2) If there is a relationship between, what is its status?

Answering these questions necessitates a scientific and accurate research work.

Significance of the study

Entering the global competence scene needs optimized international information – communication systems that helps the organization to compound different sources and performs great strategic reshuffles internally. Organizations look at information technology as a way for access to larger and better markets, better and more services, better way for gathering ideas, better and easier way to do works, cheaper services and operations, more precise control and faster access to internal and external sources and also faster and cheaper communications (Shirdell, 2010).

Results of this research is worthy because organizations as basic foundations of the society need information technology for existence and advance in information and communication century. Proper use of information technology itself brings speed, solidarity, innovation and flexibility for organizations. Advancing in this competence without information technology is impossible.

According to the theoretical and practical importance of this study, we are to address the relationship between the level of information technology usage in Yazd executive systems and organizational success. Utilizing this technology makes organizations in their way toward their goals and ideals more successful.

Research Objectives

Main objectives

- Understanding and description of information technology in Yazd executive systems
- Understanding and description of organizational success in Yazd executive systems
- Understanding and description of the relation between level of information technology utilizing and organizational success in Yazd executive systems

Secondary objectives

- Understanding and description of the components utilizing IT and analysis of their relationship with organizational success in Yazd executive systems

Theoretical definition of words

Information: it is the second level in knowledge management. This level consists of abstracted qualitative data that is categorized, purged and

organized to get meaningful (Abtahi & Salavati, 2006, p: 6).

Information technology: IT is a branch of technology that studies and uses data for storage, handle, transformation, management, control and data logistic purposes using hardware, software and networks (Fathian & Mahdavinoor, 2007).

Transaction processing system: Task information systems that are used in operational areas of organization like accounting, marketing, sales, human sources producing, storage, etc are called transaction processing system that processes daily, repetitive organization interactions (Sarafizadeh, 2010). Transaction processing system is a system that processes data and information of a trade exchange and returns the results in a proper time using a computer system. Such a system usually works with numbers and digits, so has a high mathematical and statistical analysis power and sometimes it is called calculation processing system (Feghahi farahmand, 2005).

Management information system: this system provides management, operations monitoring, keeping cooperation and operative records necessary for organization management for managers (Zargar, 2003). A system that has the role of gathering and reconstruction of information from outer world and organization's internal trading, and prepares information for decision making, programming and control by organizing and data selection, is called management information system (Ghenaatgarekasbi, 2009).

Decisions support system: it is a kind of information system that prepares data, models and analysis tools to help decision making in non routine conditions in organization (Zargar, 2003).

Office Automation System: this consists of using electronic tools in office activities to raise effectiveness and efficiency (Moghadasi, 2007).

- Knowledge Support System: these systems are defined as a set of professional software that backups knowledge unit stuff. These systems are designed for different proficiencies and sciences (Sarafizadeh, 2010).
- Executive Support System: they are systems that satisfy major managers' informational needs. They have the highest level in data composition and usually consist of reports in standard form and graphs (Sarafizadeh, 2010).
- Hardware: physical tools used in input, processing and output of a computer system (Torban & et al, Mostafavi et al, 2007).

Success: management experts define success as follows: accessing one's life's worthy goals in a specified time framework (Kordmoghadam, 2008). Success is a comparative matter and never gets a unique definition (Shahabadi, 2008). We can say that success means having a lot of endowments, namely relative welfare in life, respectability in working environment and in the society, having no worry, shame or defeat feeling. Success is the goal of the life and everyone wants success and the best things he can get from the word (Asadilari, 2011).

Organization: it's a social institution with goals whose structure is designed consciously and has active and harmonic systems that communicate with outer world (Daft, translated Parsaeian & Aarabi, 2006).

Organizational success: to achieve a goal that is considered by the organization to get credibility and proper position. In other words it is to understand preferences and act according to them (Hadavi, 2009).

Organizational success according to these factors

Speed: today's successful organizations are known progressively by speed attribute. They answer the costumers with a higher speed, enter new products to market faster and change guidelines faster (Karami, 2012).

Flexibility: it means the ability to produce and present different products and gain different goals with the same tools and resources (Osoli, 2013).

Innovation: "kater" defines it as the process of gathering new ideas for problem solving and believes that innovation consists of idea forming, acceptance and execution of new ideas in process of producing new products and services. Innovation is the process of creating a new thing that has a considerable value for person, group, organization, industry and society. So, innovation is to create a new worthy thing (Mamizadeh & Khaliliakbari, 2008).

Solidarity: extend or degree to which people correlate with each other and share in group goals. It means, the more group members correlate each other and the more group goals be harmonized with members goals, the more solidarity we will see (Rabinz, translated parsaiean & Aarabi, 1999).

Theoretical framework of the research

In this research, organizational success (major variable), is the first variable surveyed. We try to explain, analyze and elucidate its variations on infor-

mation technology (predicting variable) utilization.

Dimensions of information technology include Transaction Processing System, Management Information System, Decision Support System, Office Automation System, Knowledge Support System, Executive Support System & hardware (Seidjavadin,1388,p:966). Also dimensions of organizational success include speed, solidarity, innovation and flexibility (Keshavarz, 2009).

Organizations utilize advanced information technology and this technology has had a great influence on impact on them. In most cases these impacts has been positive and the structure of organization has become more dynamic. From workshop management hierarchy's point of view, these technologies have been substituted for daily repetitive tasks and brought organization's stuff and members, more independence and autonomy and made the tasks more attractive. Information technology utilization reinforces group works and led organizations be more flexible and make faster reactions to environment. IT utilization also enriches jobs so that stuffs feel more happiness and freshness (Taghizadeh, 2007).

One advantage of technology for management is speeding the decision making process. Utilization of advanced IT leads organization to spend less time on conferences needed for decision making. This technology has also decrease the time needed for resignations, and decrease the message repetitions and corresponding groups can directly connect each other. Such an IT will speed up the problem recognition (Taghizadeh, 2008).

Using IT leads organizational activities be observable for managers (Mehrinezhad, 2002).

Research Hypotheses

Main hypotheses

There is a relationship between IT utilization and organization success of executive systems in Yazd

Alternative Hypothesis

1- There is a relationship between transaction processing system utilization and organization success of executive systems in Yazd.

2-There is a relationship between management information system utilization and organization success of executive systems in Yazd

3-There is a relationship between decision support system utilization and organization success of executive systems in Yazd

4-There is a relationship between office automation system utilization and organization success of executive systems in Yazd.

5-There is a relationship between knowledge support system utilization and organization success of executive systems in Yazd.

6-There is a relationship between executive support system utilization and organization success of executive systems in Yazd.

7-There is a relationship between hardware utilization and organization success of executive systems in Yazd.

Materials and Methods

In this research, according to the objective of research subject, it means the effect of IT utilization on organizational success which the research is applied and its method is regarding descriptive. The statistical society used in this research consists of 152 managers and assistants of Yazd executiveorganizations.

Data collection tools

In this research the data collection tool consists of two questionnaires.

A. Questionnaire of Information technology that consists of 33 questions.

B. Questionnaire of Organizational success that consists of 20 questions.

To evaluate the questionnaire's components, variables are presented in ranges: extremely high, high, and rather high, low and extremely low. Validity and reliability of it was 0.975 and 0.963, respectively and for organizational success are 0.935 and 0.909, respectively.

Data Analysis Method

Occurrence table and rod diagrams give a description on demographic indexes and research hypotheses. Then, to survey the research hypotheses, we used Pearson and Spearmen tests with distribution diagrams to specify the relationship between the two variables, specification coefficient and regression analysis. The software we used here was SPSS.

Results

Studied sample of the research contains of 152 managers and assistants of Yazd executive organizations which has the Following demographic properties. Regarding data analysis, studying sample contains 99 men (%84/6) and 18 women

(%15/4), 5 single (%4/4) and 109 married (%95/6) people. Studying sample from education represents 6 people (%5/2) diploma, 52 people (%44/8) BA, 48 People (%41/4) M.A and 10 people (%8/6) doctoral. Their ages contains 20 people (%17/1) by 1-10 years of service, 58 people (%49/6), 11-20 years, and 39 people (%33/3) 21 years and more, 6 people (%1/5) in the age group of 30 years or less, 52 (%44/4) and 40-31 years and 59 people (%50/4) were in the age group 41 years and over.

Analysis of table data shows that there is a meaningful relationship between the IT utilization and organizational success in Yazd executive organizations.

Table 1. Pearson and Spearman correlation test as to the relationship between the use of IT and organization successfully of Yazd executive systems

Variable	rate application of information technology								
test	Pearson			Spearman					
Organizational Success	The correlation coefficient	Significant	number	The correlation coefficient	Significant	number	Relationship	kind of relationship	The coefficient of determination
	0.564	0.001	117	0.514	0.001	117	yes	direct	0.318

Conclusion

The objective of this research is to study the relationship between IT utilization and organizational success in Yazd executive organizations. IT is the predicting variable and organizational success is the major variable of this research. In this research, dimensions of information technology include transaction processing system, Management Information system, decision support system, office automation system, knowledge support system, executive support system & hardware. Also, dimensions of organizational success include speed, solidarity, innovation and flexibility. Here we have one main hypotheses and 7 subordinate hypotheses. Results of study on hypotheses show that all of hypotheses are confirmed.

This result corresponds to the results of Moghimi and Namdari's (study 2005). They say utilization of IT in government organizations will lead to reconstruction of these organizations to a great extend. So, enough attention should be paid to this matter by organizations and they should introduce different kinds of these technologies to their stuff.

This result also corresponds to the result from Baroo & et al (2009). They show that students who are taught through computer have obviously better turnover compared to students taught in traditional system (Sattari & Mohammadi, 1390, p: 85).

It is also consistent to the result from Toolaee (2006) who concluded information systems and advanced organizational technology leads to manager's empowerment and helps organizational activity control and effective decision making. So, it is expected that we expect to observe success by utilization of IT.

Recommendation

In this section, according to the results obtained, at first some practical advices are presented to organizations and then we present some offers for future researchers.

As there is a meaningful relationship between IT utilization and organizational success we recommend that:

1. Rais managers and stuff computer literacy by appropriate educational classes on IT utilization.

2. Expansion and utilization of IT in organization's environment.

3. Managers should backup IT more than before in utilization and organization design appropriate for IT.

4. Managers should support IT by more attention to innovators and direct contribution in technological processes and they should also help expansion of IT in organization spaces by legislating supportive rules, preparing conveniences and encouraging technological plans.

5. It is necessary that enough space be prepared for installation of IT in all organizational levels and avoiding its centralization. So, managers should do these for more organizational success.

6. Organizations should put IT utilization in top of their program and make necessary investments for its utilization. They should teach their stuff appropriate educations in this way.

References

Abtahi, S., & salvaty, A., (2006). Knowledge management in organizations , first volume, Peyvand No distribution, p.6.

Arrafzadeh, A., (2009). Management information systems: a strategic approach, pp. 106, 170, 188 and 189.

AsadiLari, M., (2011). Comparative study of human factors and manufacturing companies Bolts Kamkan Sirjan and Tehran Takvin and its relation with organizational success, M.sc thesis, p. 39.

Collins, J. (2003). Good to Great (2001), translated by Nahid Sephehrpoor, printing, Tehran, emission peak poses, pp.214 – 229

Daft, R. (2006). Foundations of Organization Theory and Design, Ali Parsaeian and Mohammad Arabi, Fifth Edition, Cultural Research Bureau, Tehran , p.327 .

Fathi, M. and Mahdavinoor, H. (2006). Principles of Management and Information Technology, Second Edition. Tehran: Iran University of Science and Technology, pp. 71.

Feghahi farahmand, N. (2005). Strategic management, foroozesh Press, pp: 200 and 201.

QEnaatgarkasbi, M. (2009). Developed a business model for the system (MIS), Master Thesis, pp. 19 and 20.

Harpist, G .(2006). Five secrets of high perform companies, from: www.sixdisciplines.com.

Highlight, A. (2009). IT Governance in Organizations, www.modiryar.com.

Karami, M. (2012). Evaluation of learning and its relationship to organizational success in executive city of Rafsanjan, Rafsanjan University master's thesis, p. 12.

Kordmoqadam, E. (2008). Inserted in the base of Seven Seals Information Technology, Page: 4, www.sm.epage.ir

Mahdavi, A. and Tarahzadegan, F. (2010). To assess the quality and effectiveness of enterprise information systems, theoretical, Tehran, pp. 82.

Mamizadeh, F and Khalili, Akbari, H. (2008). Organizations manage future printing, Tehran, Bazargani publishing company, pp. 6.

MehriNejad, S. (2002). Application of information technology in organizations, political information - 181-182 Economics I and II, Title Page: 225.

Moghimi, M., Namdari, N. (2005). The relationship between information technology and reinventing government, culture, management, Third Year, No. 9.

Noori, H. (2007). The impact of innovation on competitive markets in East Asia, a paper web address: www.naftepars.ir.

Osooli, H., (2013), agile organization, management and marketing of Prosperity Bank, www.modiran.ir.

Robbins, A. (1997) . Principles of Organizational Behavior : Concepts , Theory and Applications, Ali Parsaeian and Mohammad Arabi, Fourteenth Edition 1389, Cultural Research Bureau, Tehran, p.507.

Sarrafizadeh, A. & Ali Panahi, A. (2004). Management Information Systems, Theories, Concepts and Applications, Third Edition, published by Mir, Tehran.

Sattari, P, & Mohammadi, P., (2011) . The relationship between information technology use and academic achievement of high school students, Journal of Information and Communication Technology in Educational Sciences ,first year number four, p. 85 .

Shahabadi, H., (2008), published in site rahkare modiriat.

Shirdel, S., (2010). strategic planning information, the success of organizations.

Taghizadeh, A. (2007). Millennium IT strategy, Tehran, New World, I, 78 and 106.

Tavalaee, R. (2006). The effects and limitations of

modern information systems in organizations management scientific articles base.

Turban, A., Rainer, R., Potter, R. (2007), Introduction to information technology, S.Akbr Mostafavi, S. Mojtaba Mostafavi & Jvadakbry Naghos andisheh companies: Zanis, Tehran. P: 70.

Vahabzade, S. (2012). IT departments are included in Vista website.

Hadavi, P. (2009). Examined the relationship between mission and organizational success in Rafsanjan city executive, public administration master's thesis, University of Rafsanjan Aslamyvahd, p. 11.

Zargar, M. (2003). Fundamental Concepts of Information Technology, Printing, Tehran: Behineh, pp: 37, 36.