Provision of a Model to Spread the Use of Information Technology in Serving

Seyyed Habibollah Mirghafoori[1], Hossein Sayyadi Toranlu[2] and Jamal Dehghani Ashkezari[3]

[1] *Associate Professor of Yazd Science and Art University; e-mail:mirghafoori@yazduni.ac.ir*
[2] *Rafsanjan Vali Asr University e-mail:h.sayyadi@vru.ac.ir*
[3]*Information technology management graduate student, Ashkezar Science and Art University*
e-mail:Jml1368@yahoo.com
Corresponding Author Email: mirghafoori@yazduni.ac.ir

Abstract

After the arrival of new technologies to communities, the way of using these technologies in organizations had been encountered with several developments. An organization's authorities necessarily need to understand that today accountability and acceptance responsibility in organizational serving criteria has been reached into the field of information technology. Dependency of organizations and employees and referrers, as well as organizational processes and procedures on information technology tool has doubled the necessity to take seriously the issue called information technology universality in server organizations. Therefore, information technology universality is an organizational advantage. Organizations need to be managed effectively in information technology universality for serving in order to succeed. The purpose of this article is to provide appropriate and desirable strategies for serving by spreading the use of information technology. The effective factors on spreading the use of information technology for serving have been firstly identified in this article. Then, the current and desirable status of organization in terms of the use of information technology has been investigated. In continue the appropriate strategies have been provided to apply information technology for serving in this institution while identifying critical factors.

Introduction:

After the arrival of new technologies to communities, the way of using these technologies in the organizations had been encountered with several changes. Computers were used as a luxury commodity at the beginning of the arrival of this tool to the organizations. They gradually changed to the tools in order to perform organizational and specialized activities after spreading variety of software and hardware [10].

Undoubtedly, today dependency of organizations, employees and referrers on a tool called information technology has increased significantly due to posing issues such as electronic services that have created several electronic concepts in all affairs such as e-city, e-government, e-citizen, e-banking, e-health and so on; in a way that if this tool is not used any way or the process of using this technology is disordered, all kinds of organizational services will be subject to deficiency and risk [11].

An organization's authorities necessarily need to understand that today accountability and acceptance responsibility in organizational serving criteria has been reached into the field of information technology. Dependency of organizations and employees and referrers, as well as organizational processes and procedures on information technology tool has doubled the necessity to take seriously the issue called information technology universality in server organizations. Therefore, information technology universality is an organizational advantage. Organizations need to be managed effectively in information technology universality for serving in order to succeed. Institution of Imam Khomeini Relief Committee (RA) is one of

the organizations that have always been pioneer in the affair of serving. This institution has been established in the Islamic Revolution with the aim to help deprived people and poor families. Undoubtedly this institution's employees like as other organizations but rather more than the other organizations require using information technology for serving [2].

According to what was said, the aim of conducting this research is to provide appropriate and desirable strategies to serve clients of Imam Khomeini Relief Committee (RA) in Yazd province and receive services through different groups of the society for the poor group of that institution by spreading use of information technology.

This issue can help this institution's assistants and benefactors in order to provide better services with more appropriate quality in less time. Also, various groups of community can take step in order to help the deprived people and vulnerable group by using the capabilities of information technology. Therefore, this issue can be examined from two aspects: receiving service from mighty groups of society, providing service to the clients by the employees of that institution [2].

The effective factors on spreading the use of information technology for serving have been firstly identified in this research. Then, the current and desirable status of Imam Khomeini Relief Committee (RA) in Yazd province in terms of the use of information technology has been investigated. In continue critical factors for using information technology have been investigated by evaluating desirable status of this institution. Finally, the appropriate strategies have been provided to apply information technology for serving in this institution.

Necessity for conducting research:
Today, with the increasing expansion of information technology, organizations oblige themselves to consider information technology universality as a tool to facilitate the affair of serving in their long-term and short-term programs. This issue shows the importance of the role of information technology in the organization. Server organizations also are not excluded from this category. This is because these institutions can provide better services with higher quality in a shorter time due to high advantages of information technology [8]

Imam Khomeini Relief Committee (RA) is one of those serving institutions that take step to elevate the family system in deprived and poor groups of the society. Undoubtedly, conducting this important and vital mission in this organization can play an effective role in improving the economic, social and cultural situation of the society.

This institution is also considered a public institution. It helps deprived and poor families in order to grow and improve the basis of society by providing various economic, cultural services and social support. Since elderly and physically disabled people constitute the major part of the referrers of this institution, the use of information technology can take place in many cases with receiving service without referring of the needy people. This issue greatly helps to the way of providing services to these people [2].

Another part of the duties of this institution is attracting public aids and deposits, including alms and benevolent aids. Information technology in this field of activity can also play a significant role in attracting this type of credits in society. Use of applications in cell phone, various web sites, social networks and the world's modern technologies can make this institution more active in attracting public aids [2].

Theoretical Framework:
Karimi research results suggested that five factors of attitude, conditions and facilities, usage background, support and skill estimate 61.86 % of the variance of factors affecting applying information technologies by the educators of Technical and Vocational educations [1].

Dorani and Rashidi research results showed that variable of subjective perception of ease of using information technology has a significant effect on variable of subjective perception of usefulness of information technology and attitude toward information technology.

Also variable of subjective perception of usefulness of information technology has a significant effect on decision to use information technology. This variable has a significant effect on the use of information technology [3].

Sheikhshojaee and Olumi research results suggested that constituent factors of technology acceptance model have an effect on applying information technology by librarians [4].

Mashhadi showed in his research that there is a significant relationship between age, occupational experience, thesis guidance, skill to use computer and Internet, skill in English, the number of scientific works and people's attitude to information technology with applying information technology [5].

Falaki research results showed that there is a significant relationship at level of 1% between applying information technology and history of participation in educational courses in field of information technology, attitude toward the use of information technology, English language proficiency, average use of Internet and computer, age and education level [6].

Asadi and Karimi research results suggested that there is a positive and significant relationship between the level of familiarity and skill in English language, familiarity and skill in Internet, computer familiarity and skill, the background of applying information technology, technical factors and environmental conditions with the use of information technologies by educators [7].

Sun and Zhang studies indicate that there is a positive bilinear relationship between investment in information technology and institutions' returns and human force productivity. Information technology also increases the ability of organizations. This is the result of increasing products variety and quality improvement and attracting customer satisfaction.

It also facilitates administrative process and increases returns of human force and management. One of the major results of information technology is decentralization and centralization at the same time. This means that the works can be done remotely without the need of physical and continuous presence in place. This feature emphasizes on shortening the intervals and local distances as a superhighway [16].

Hysang concluded in his research that applying information technology by educators is directly influenced by individual factors and their subjective perception of the usefulness of information technology. Subjective perception of ease of using information technology has a significant relationship with subjective perception of usefulness and the use of information technology. The educators' attitude to information technology has also a significant relationship with their use of information technology [10].

Yaeghubi and Shamsaie realized in their research that respondents have a positive attitude to the Internet. There is a positive and significant relationship between Internet use and features such as age, skill in English language, computer skill, research activities, and the number of scientific works and occupational experience of them [19].

Saad showed in his research that the triple axes that are considered in applying information technology in organizations include: people, infrastructure and applications. Education, increase of skill and culture-making are the first basic axis that is posed as people. Network, technical equipment, rules and regulations are axis of infrastructure. Finally e-learning paperless system, teleconferencing, e-government, e-commerce and so on are posed of axes of application of information technology [15].

Rezai et al., found in their research that there is a positive relationship between the willingness of students to e-learning with their subjective perception of usefulness, experience of Internet usage, and self-esteem in the field of computer. There is a negative relationship between computer anxiety and students' age with their willingness to e-learning [14].

A study in Philippines specified that variables such as gender, educational degree, job, income, awareness, knowledge and attitude toward information technologies are effective in applying services related with technology in researches [12].

The result of another study suggested that attitude to computer and self-esteem in the field of statistical software has a positive and significant effect on subjective perception of usefulness. In addition, subjective perception of usefulness and subjective perception of ease of use has a positive effect on the willingness of learners to use statistical software. However anxiety has a significant and negative effect on subjective perception of usefulness, subjective perception of ease of use and decision to use statistical software [9].

The result of a study in Iran agricultural colleges showed that income, computer skills, familiarity with Internet, skill in English language and research activities have a positive and significant relationship with the amount of use of Internet by faculty members [13].

The research result of You et al., showed that subjective perception of usefulness, subjective perception of ease of use, and computer skills have a positive and significant effect, and mental image has a negative effect on decision of health care providers to use information technology. Mental image, subjective norm, and computer skills have also indirect effect on decision on use through ease of use.

Tang and Chung study revealed that computer anxiety has a negative effect on the students' decision to use information technology. Self-esteem in the field of computer has a positive effect on the students' decision to use information technology. Also, compatibility has a positive effect on subjective perception of usefulness

and decision to use. Subjective perception of usefulness has a positive effect on decision to use information technology. In addition, subjective perception of ease of use has a positive effect on subjective perception of usefulness and decision to use. Subjective perception of quality of information has a positive effect on decision to use information technology [18].

Review of research background shows that acceptance and use of information technology is as one of the pillars of researches of information technology field. Identification of factors affecting spreading the use of information technology with the aim to serve by users had been posed as a basic issue in this regard.

Hence, if we are looking for providing a model to spread the use of information technology for serving in an organization, it is obvious that firstly we must identify the effective factors in this regard. This background will help us significantly to identify the effective factors.

Research methodology:
Complete description of research methodology:
The present research type is applied and with descriptive-analytic method. It seeks to provide a model to spread the use of information technology for serving in the Relief Committee. In this research we firstly identify effective factors on spreading use of information technology in Imam Khomeini Relief Committee (RA).

We evaluate the current status and desirable status of use of information technology for serving in this organization in the second phase by using fuzzy techniques. In continue we identify the critical factors of this issue by using evaluation diagram. Then we express appropriate strategies to deal with the problems and spreading the use of information technology for serving.
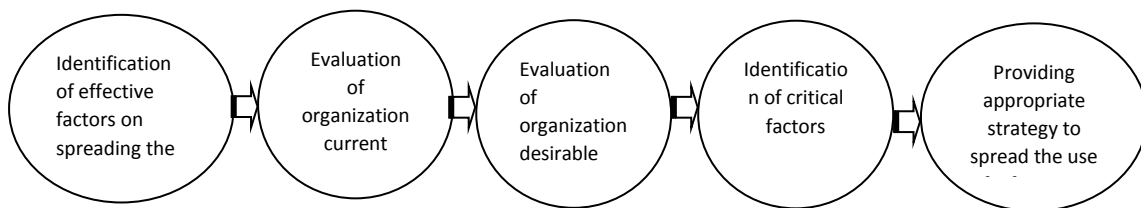
Figure 1: Stages of conducting research
Statistical population in this research includes all managers and employees of Imam Khomeini Relief Committee (RA) in Yazd province. Type of sampling will be random in this research.

Information collection method:
Library studies, field studies and database search and use of experiences and opinions of experts related to the topic are of the integral elements of this research.

Information collection tool:
Questionnaire that is the most common information collection tool has been used in order to identify effective factors on spreading the use of information technology for serving in Imam Khomeini Relief Committee (RA) in Yazd province.

The research tool was a questionnaire consisting of four sections of personal information, skill in using information technology, psychological topics of using information technology and amount of use of information technology (computer and Internet).

Content validity of the questionnaire was confirmed by using the experts' opinions. Its reliability was confirmed by using pre-test and Cronbach's alpha. Cronbach's alpha value for the main variables of research was obtained between 0.70 and 0.90. This indicates high reliability of the research tool. Data were analyzed by using SPSS software and in two parts of descriptive and inferential. In descriptive part statistics of percentage, mean, minimum and maximum were used in descriptive part. Correlation analysis and regression analysis were used in inferential part.

Conclusion:

The rapid growth of information technology, especially Internet-based technologies have changed serving in server institutions. Employees of these institutions provide rich learning environment for their addressees with the help of these technologies. Assistants can also gain valuable information and resources. They can follow up their service activities without any restrictions of time and place.

Assistants in server organizations are as addressees, customers and beneficiaries of higher education. Hence evaluation of their viewpoint on the use of information technology is very essential. Understanding the viewpoint of learners as an understanding learning method in service institutions has been also emphasized in some educational theories [11].

The results of this research have studied the assistants' viewpoint on use of information technology. These results show that age is one of the individual factors affecting use of information technology. This topic has been also mentioned in other researches [14]. So utilizing persuasive strategies to motivate young assistants to use information technology can increase the use of information technology. This is because some researchers believe that young users of information technology are more motivated by extrinsic rewards, while older users may be more influenced by social factors [13].

Assistants' subjective perception of ease of use of information technology is another variable that has been emphasized in this research, as well as other researches [18]. That's why designing or purchasing systems for Relief Committee, which learning to use them is easy will lead to increase of use. Skill in use of information technology and having experience in this field is also of the variables that are emphasized in the present research [21].

Skill implies efficiency in a number of applications of information technology such as computer and internet services (word processor, variety of software, e-mail, searches and web chats, etc.) and other technologies. Therefore, holding courses and workshops in the field of information technology is very helpful for the assistants. Creation of a positive attitude among assistants about the advantages and applications of information technology is also essential. This is because the type of attitude toward information technology has a direct effect on the use of technology. Other studies have also confirmed this matter. [22] [6].

Modernist being of the assistants is also an important factor affecting the acceptance of new technologies. Therefore identification of assistants who are more willing to take risk through testing an innovation can predispose for encouraging assistants to use information technology and spreading use of it. This is because these people show more social participation. They also more socialize with others through interpersonal networks. They are more subjected to interpersonal communicational channels [9].

Computer anxiety is a variable that has a negative effect on the use of information technology that has been mentioned in other researches [20] [12] [22]. The failure or success in the past in working with current information technologies and tasks that are performed by using computer has role in this anxiety [19]. The researchers found that computer anxiety has a negative relationship with the number of hours of Internet use [14]. This means that whatever the assistants more communicate with technology, their anxiety decreases. That's why encouraging assistants to greater use of information technology and educating them in this field will reduce their anxiety and increase their self-esteem as another important variable in the use of information technology [15].

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