

The effect of the use of information technology in urban management systems (Yazd)

Abbas Navabpoor (corresponding author)

- 1- Yazd branch, Islamic Azad university, Yazd, Iran.
- 2- Commercial director, Company of Pishgaman Kavir Asia, Yazd, Iran.
mohsen8203934@yahoo.com

Abstract

Today, with more complex urban issues, there are numerous ways to solve problems. One of the most common methods around the world, resulting in significant developments in information technology and communications, Where quality and way of life, such as social change and economic development, is significantly dependent on information and its utilization. Based on the findings of a survey among organizations and citizens of the city of Yazd is provided. To collect information on library, documentation and field (questionnaire) and SPSS20 software to analyze the data used finally, these results obtained from the use of IT facilities for urban current affairs is low. Centers, facilities and web sites of IT services provider in the city of Yazd in providing electronic services to citizens has been quite satisfactory. A bout the index of E-citizen and acceptance of it, people are more willing to use the technology. And finally, the access to information and communication technology, although high among managers, but most citizens do his work by calling. The study suggests that because of structural weaknesses and lack of expertise in the use of this technology, managers tend to do things the traditional method that requires training in this field.

[Abbas Navabpoor. **The effect of the use of information technology in urban management systems (Yazd)**. *J Am Sci* 2024;20(5):23-27]. ISSN 1545-1003 (print); ISSN 2375-7264 (online). <http://www.jofamericanscience.org> 04. doi:[10.7537/marsjas200524.04](https://doi.org/10.7537/marsjas200524.04).

Keywords: E-citizen, information and communication technology, urban planning, urban management.

Introduction

A detail of our time is massive urbanization, population growth and consequently the development of small towns and big cities. Urbanization of more than 5 thousand years old, while in 1900 only one out of every 8 people lived in urban areas. During the period 1990 to 2030 urban population will grow by about 3.3% billion, out of which 90 percent will be in urban areas in developing countries. As migrants in search of work, better opportunities or just food and shelter continue to migrate to the cities. Infrastructure capacity are often under pressure even decreases, Current housing situation worse and become more dense housing. , Open spaces raped urbanization today, and ... (Kazem Mohammadi, 2001) One of the problems is that the majority of them in Asia, Africa and Latin America annually up to 60 million people are added in the poorest countries of the points. (Stephens and Stterthwaire, 2008: 300)

If the city is regarded as an organization, be it at the top and to manage the affairs of the city used that is the same urban management.(Shee,2003) The management groups in different networks that the judge deemed their interests and the interests of the urban structure is

effective orientation. with urban management deals to evaluate the spatial issues that citizens are involved

"Today, with more complex" urban issues, there are numerous ways to solve problems. One of the most common methods around the world, resulting in significant developments in information technology and communications, Where quality and way of life, such as social change and economic development, is significantly dependent on information and its utilization.(Martin,1992)

Increase the speed of calculation and fast information processing and transfer it quickly, reducing turnaround times and thus increases productivity. IT also provides the ability to search and access to information.(Shekh Kazem,2007)

Understanding the transmission speed in this space, creates different urbanization with the old traditional urbanism. Pay bills, telephone, electricity and gas with many financial transactions or perform administrative affairs related to municipalities, and with reference to the speed of the mouse button or to give or receive a set of data can take place.

Increased accuracy: Accuracy of work in jobs based on people is variable, while still providing high-precision technology and ensures the accuracy of

computer processing and computing is much more than human.

Reduce corruption: using information technology to increase transparency in doing things that various amounts and eliminates many intermediaries.

A place of full-time job: to help IT people and so many inquiries and requests via computer networks and automatically done.

Remove the waiting and queue: reduced waiting time for citizens to receive services and reduce time wasted on multiple lines increase the useful life of urban citizens and increase the productivity of time.(Shekh Kazem,2007)

Reducing air pollution reduction as a result of increased traffic caused by the use of Internet in rural activities certainly will reduce pollution caused by cars in the city.(Khayam Bashi,2007)

Telecommunications elimination of some business, it is predicted that information technology has a great impact on transportation systems and urban transportation.(Gerant,2000)

Today, ICT should be entered as soon as possible the process of urban planning in this respect, of course, the municipalities, the largest city of the urban planning authorities are not separated.

In view of the development of information technology in the service of citizens and other entities media and citizens' expectations to be with planning their services in the field of information and communication technologies provide (Rabane,2006)

The importance and necessity of research

In the life of our machines are now considering how the employment of family members to work and education, the needs and distribution services, with virtually no adverse consequences such as traffic, air pollution, energy waste, bureaucracy and complexity of delivering services.

Government, lack of proper coordination unit functions and urban organizations to implement a centralized management and a significant increase in urban population and reduce the volume approach and extent of government agencies are facing. Although this technology is not the solution to all urban problems, but one of the tools that urban planners have used to achieve their goals better. It is a powerful tool to improve the quality of life, but as long as the attitude, behavior and lifestyle of the people in a way compatible with the use of this technology should not be expected to be unchanged at the level of social welfare. Nevertheless, because of the importance and value of this research is that virtual access to services, information and resources not only reduces urban problems, but also administrators in order to achieve better goals and assists service. It is considered less in Iran.

Research goals

Recommendations for the use of IT in management and urban planning

Research Hypothesis

Providing access to IT facilities at the residence or employment decreased direct referrals for personal affairs and the administration.

The measure satisfaction of IT services by more organizations will be more inclined to use this service. The level of information literacy of individuals and acceptance of technology are related.

Research methodology

This research aims to integrate two branches of information and communication technology, urban planning and management, so as to achieve its results in Yazd. Such research is necessary for the enjoyment of the view that the ability to have a comprehensive approach. For applied research and development, analytical methodology, documentation and survey. To complete existing data the first batch of questionnaires was used sources. The population studied in the process of questioning is the citizens and managers (institutions and organizations).

sampling of the population is Random. The sample size was performed using the Cochran method. Due to the possibility of Yazd study was not possible, the samples were selected(Hafez Nia,2001)

Data collection for this research, library resources and a questionnaire, have been analyzed and conclusions through important tools such as SPSS.

The questionnaire consisted of 40 closed and open questions. In open-ended questions, questions such as gender, age, educational level, employment status, and so forth. Because of the statistical unit of effort has raised questions closed, so that the participants in the shortest time to respond to questions. The nature of some questions in a way that can be measured with a single question, including the use of IT resources to tasks and personal affairs. But some of the questions that has had many items of Likert scale was used. After the internal stability of the items were from the validity, reliability derived from the items, 0/79%, respectively, which indicates the validity of the acceptable items of cases.

IT indices

Indicators is the most basic and most critical measures of symptoms and shows the status of an urban community. But understanding and assessment of information and communication technology in the cities and provinces of the country due to the newness of the subject and content of fully do not defined criteria and indicators. But through field studies and

visits to organizations can be better assessed the situation as Table 1 shows some of these indicators. Although Yazd municipal site provides limited services electronically, but many receive services through the portal Yazd and Yazd in the context of a successful portal. The number of IT offices in the city to 10 seems to have provided good services to citizens.

The present situation	Index
39	Fixed phone penetration
29	Mobile phone penetration
15.2	Internet penetration
14.8	Offices of communication services in the city
2	The number of post offices

The study of information and communication technology The sex of respondents

Survey of IT facilities at Location

In terms of access to ICT facilities in this area have the highest percentage of TV 96/2 and 98/2 of the phone, 79/5 per cent of the mobile and 34.1 per cent computer and the least access to the Internet.

The frequency distribution of access to ICT facilities in location

Total	Very High	High	Average	low	Very low	Facilities
400	50	150	90	60	50	Phone
400	40	140	100	80	40	TV
400	50	210	50	60	30	Mobile
400	100	100	120	45	35	Computer
400	50	170	80	50	50	Internet

Survey of IT resources in the workplace

In terms of access to IT facilities in the workplace phone to have the highest percentage of 90 percent and 29.4 percent Fax, and 29.4 percent PC lowest access rate of 11.1 up to the Internet.

Evaluation of the use of IT facilities for carrying out municipal routine affairs

To do common tasks by means of possibilities IT, 22/1 percent too low, 20/8%, 20/8 percent average, 18/7 high percentage, 11/3% of respondents are very high

The frequency distribution of access to IT resources in the workplace

Total	Very High	High	Average	low	Very low	Facilities
400	50	180	70	60	40	Phone
400	20	30	80	145	125	TV
400	70	80	100	90	60	Mobile
400	50	100	150	60	40	Computer

The components of the respondents sex show how population density of 300, 75 men and 100 of 25 women.

Educational of respondents

Survey respondents' level of education shows that the highest number of respondents, 57% of them are high school graduates and associate's degree.

21 percent have a bachelor degree or undergraduate students, 15% of these high school diploma, 4 percent have a master's degree or higher and only 3% of the respondents were illiterate, which Figure 2 shows the educational status.

Employment status of the respondents

Survey respondents indicated that employment status The largest number of respondents is 36.8% of government agencies engaged in, 24.2% of self-employed 14%, 19% private work 5% are retired of them are educated and 1% others.

Evaluation of E-citizen index

Since the information in the information needs of citizens. Of the changes that occur in human society, and society to the side leads to living in such a society have the skills that reflected the concept of e-Citizen.

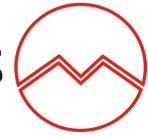
Percent and the acceptance of IT on the role of IT in management and urban planning

Total	Very High	High	Average	low	Very low	Items
400	125	50	125	75	25	The computer use
400	75	75	150	60	40	Internet use
400	100	60	140	55	45	The use of credit cards
400	100	80	120	65	35	The use of electronic networks
400	50	150	70	75	55	Leisure time by working with the Internet
400	63	137	120	33	37	The use of e-services offices
400	100	76	124	46	54	The use of virtual spaces like digital library
400	50	152	98	58	42	The needs of the Internet
400	46	100	154	99	51	The use of communication services and Internet cafes And Post Bank

Study of electronic citizen and indices (the level of information literacy of citizens)

Total	Very High	High	Average	low	Very low	Items
400	112	88	40	60	100	IT tasks without calling on the increase
400	50	150	70	70	60	IT will increase the use of the Internet to get things done
400	50	104	46	114	86	IT service providers in established neighborhoods continue the
400	20	50	130	101	99	IT makes daily purchases will be in the neighborhood
400	30	100	120	63	87	IT will reduce the city's traffic problems
400	100	80	120	55	45	IT will lead to diversification of urban spaces
400	50	83	67	124	76	IT indirect participation of citizens in municipal affairs will increase
400	46	54	79	121	100	Reduce the costs of municipal services
400	40	60	152	68	80	IT will lead to decentralization of urban centers

Evaluation of E-citizen index shows that people are prepared to use this technology.



The results of hypothesis tests

First hypothesis: the provision of access to IT facilities in this area decreased to conduct personal visits are personal and office.

To measure the variables and the Pearson test was used to test the hypothesis. With regard to the significance level calculated ((Sig = 0 significant level of interest (05/0) is less. This hypothesis is confirmed in other words, with the rate of access to the IT resources at Location more and use of these facilities for common city also more.

Pearson test to examine the relationship between access to ICT facilities and personal and administrative current affairs tasks

SIG	The test	Exam Name
0:00	R=0.231	Pearson

The second hypothesis test (whatever the level of satisfaction of the services and IT will be more inclined to use this service.

Pearson test to examine the relationship satisfaction of people in their use of active sites.

SIG	The test	Exam Name
0.00	R=0.235	Pearson

To measure the variables and the Pearson test was used to test the above hypothesis. Since significance level calculated (Sig = 0.00) from a significant level of interest (05/0) is less. This hypothesis is confirmed in other words, whatever the degree of satisfaction of IT services is more, the service will be more inclined to stand. The intensity of the relationship between the two 32/0, which showed moderate positive correlation between these two variables that showed positive correlations were low.

Reference

- [1]. Hafeznia, MR.(2001)" *Introduction to research in the humanities*" Tenth Edition, Press right: Tehran.
- [2]. KHAYAMBASHI, E. (2007)" *Management and urban development models stepped to The city and the city-based e-commerce experience*", The first international conference on electronic city: Tehran.
- [3]. Sarafraz, M.; Memarzade, G., and A. FIROUZI, Z. (2007)" *Commerce deployment paradigm: a necessity in the virtual era*", The first international conference on electronic city: Tehran.

- [4]. Mousa Kazem, Mohammadi, M.(2001)" *Sustainable Urban Development: Concepts and Perspectives*", Geographical Research Quarterly Fall, number (3).
- [5]. Garcia R., Pi Villanueva (2001), "*Issues, Policies and Outcomes: Are ICT Policies Addressing Gender Equality? Expert Group Meeting to Review ICT Policy from a Gender Perspective*", Economic and Social Commission for Asia and the Pacific (ESCAP).
- [6]. Grant, A.E. and Berquist, I. (2000), "*Telecommunications Infrastructures and the City; Adapting to the Convergence of Technology And Policy*", New York And London: Routledge pp. 97-112.
- [7]. Martin, W.J. (1995), "*The Global Information Society*", Hampshire: Aslib Grower.
- [8]. Lucass, Henry (2000), "*Information Technology for Management*", McGraw Hill Book Co.
- [9]. Pergamon (1998), "*Urban Management and Optimizing Urban Development Models*".
- [10]. Stephens C. and D. Satterthwaite (2000), "Urban Health in Developing Countries", *Environmental Impact Assessment Review*, 20 pp: 299-310.
- [11]. Thooening J.G. Fried Berge (1970), "*Politiques Urbanies Et Strategise Corporative, Sociology*", Dutravail Dolitague Urbine, Nou, Seuil, Paris.
- [12]. Vann Veen, H.A.H.C, Distler, H.K., Braun. S.J. and Biilthogg, H.H. (1998), "Navigation through a Virtual City: Using Virtual Reality Technology to Study Human Action and Perception", In *Computer Review*, Vol. 22 (1), pp: 17-37.

5/2/2024