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Library management at Art and Cultural Organization of Tehran Municipality

Abstract:

The goal of this study is describe how public libraries in Iranian cultural centers use of information technologies to developing its services. In this research paper, a structured questionnaire was used to collect data in 80 public libraries. Descriptive statistics method and Excel 2007 was used to analyzed data. In this study, libraries used of exit information technology in acceptable range but use of non-printed resources such as electronic and digital are weakness and only 12.5 percent of libraries contain this material. Librarian's skills are suitable for used of IT in public and technical services but users need to necessary training for use of this facilities. The results of the present study show that information technologies facilities of all public libraries affiliated to the Art and Cultural Organization of Tehran Municipality are in desirable condition. Librarians and administrators also have full satisfaction of their libraries being equipped with new technologies. The interesting point in this context is to conform the nature and form of the provision of services in public libraries to the needs of users in different categories of sex, age and education.

Key words

Public libraries, information technology, Art and Cultural Organization of Tehran Municipality, assessment.

Introduction:

Information technology (IT) is one of the developments in various fields of sciences. IT has led to rapid growth of information and knowledge across the world and facilitated access to information content for users (Tapscott, 1996). Information technology has eliminated most traditional problems in the store, maintenance, control and access to information(Salton and Harman, 2003). Various definitions have been provided for information technology. The one of this definition that provided in 1989 is: "information technology include computation, automation and communication technologies and all activities related to these technologies"(Aykin, 2016). The distinctive feature of

IT age with data processing age is transformative impact of diversity of IT-based tools on organizational activities with a broader sphere of influence(Marchionini, 1997).

In the information age, all processes, sciences and various systems experience a rapid growth in the shade of information technology and communications(Poole and Sky-McIlvain, 2014). Hence, individuals and organizations need appropriate tools to keep pace with these changes. The history of computer as one of the most basic technologies in libraries and information centers in recent decades can be divided into several relatively well-defined periods(Staley, 2013). In the 1940s, the first semi-mechanized methods to store and retrieve information received attention by using edge-punched cards. In the 1980s, library software experienced growth and diversity. With the growing use of the Internet in the 1990s, libraries also have used this phenomenon in their services(Candon et al., 2014). Thereafter, libraries were among centers strongly affected by new technologies leading to significant changes in the nature of their services.

Public libraries make use of various information technologies for different purposes. The use of information technology in public libraries improves quality and quantity services and helps to increase their efficiency. A very important point in this regard is that information technology in libraries is not a goal, but it is a means to achieve goals, although it strengthens innovation and creativity and improves the quality and quantity of public and specialized services in public libraries(DiMaggio and Hargittai, 2001).

The factors leading to the use of new technologies in libraries and information centers include fast data storage and retrieve, elimination of problems related to physical space and the use of computer memory, integrated access to information and so on(Marchionini, 1997). Applications of new technologies in libraries can be categorized into two groups. The first group concerns basic and local activities of libraries including acquisition, cataloging, interlibrary loan and resource control. The second group includes notification services such as current awareness services, selective dissemination of information, virtual reference services, etc.

The factors encouraging public libraries to adopt and use new IT-based tools and methods include the use of computers and library software, relying on business networks, the growing use of the Internet and increased quantity and quality of information resources(Eve and Brophy, 2001). The use of information technology in public libraries indicates the pace with changes in various spheres of information and communications. It can be expected that libraries that have identified new needs of their clients have been a pioneer in the use of new technologies.

Some advantages of information technology in public libraries include: Improved access to library collections and collections of other libraries, increased use of library collection, improved

relationship between employees and work flow, improved quality of services at the library, Saving time and costs, the reference-based services in libraries, Generating income by providing services with high added value, Creative use of available resources and increasing the number of users(Vijayakumar and Vijayan, 2011).

To provide modern services, public libraries in Islamic republic of Iran, as non-profit organizations, must provide the necessary infrastructure and make use of new services to respond to the needs of their users(mosavi, 2009). For example, the dismantling of the traditional card catalogs in the public libraries in Iran, resource search based on comprehensive information networks and long-distance services can be noted in this regard. In this study, the use of information technology in the libraries of Art and Cultural Organization of Tehran Municipality as one of service providers to the public is investigated. The strengths and weaknesses of libraries in the use of information and communication technologies are identified to facilitate services and current affairs in libraries. This will provide the grounds for optimal planning to improve the performance of these information centers.

In this study, the following questions will be answered:

What is the status of IT infrastructure in the public libraries of Art and Cultural Organization of Tehran Municipality?

2.   How users and librarians confront with new information technologies in the public libraries of Art and Cultural Organization of Tehran Municipality?

3.   How do libraries of Art and Cultural Organization of Tehran Municipality use of information technology in technical and public services?

Literature review:

Today, Information Technology (IT) is an integral part of any library; so that many of the current library activities are not implemented without benefiting from IT. One of the outcomes of the use of IT in libraries is the improved productivity and increased functional achievements. IT makes integration faster, provides more efficient library services and acts as one of the most important library management tools(Cowgill et al., 2001).

"Information Technology" is a general term encompassing information processing and transmission tools such as computer, telecommunications and microelectronics(Longley and Shain, 1985). Apart from this general definition, different operational definitions have taken into consideration, especially in libraries and information centers, based on different attitudes. According to the definition provided by American Library Association (ALA), IT is "the use of computers and other

related tools for acquisition, organization, storage, retrieval and dissemination of information." It also means the use of hardware and software for the effective management of information include of storage, retrieval, processing, transmission, dissemination and sharing of information(Eisenberg and Johnson, 2002).

Extensive and various definitions of information technology in libraries are the result of different research goals developed by various researchers; so that in each of the associated studies, different aspects of information technologies are taken into consideration. In a series of studies, a complete list of hardware and services presented as information technology has been introduced, including telephone, fax, audiovisual and electronic information resources, etc (Eve and Brophy, 2001, Jue et al., 1999, Kopp, 1998, Spacey et al., 2003). In another series of studies, while taking into account the changes in the nature of library services resulting from the advent of information technology, other elements have been selected for the study. A combination of the terms such as digital, electronic and virtual with library, technical services, and public services; as well as other activities and services related to the libraries are found in the titles of this type of studies(Al-Qallaf and Al-Azmi, 2002, Bertot et al., 2005, DiMaggio and Hargittai, 2001, Eve and Brophy, 2001).

The attitude of librarians and users, the advantages of using, a variety of information and communication tools, the adequacy of IT-based facilities, the method of learning and using the new technologies, etc. have been considered in other categories of research(Jue et al., 1999, Kaur and Nandan, 2000, Spacey et al., 2003, Staley, 2013, Vijayakumar and Vijayan, 2011).

Examination of the status of using information technology in a variety of libraries has shown that the managers of these centers and their employees have a positive attitude towards the use of new tools(Tripathy, 2015). Provision of hardware in libraries has grown significantly compared to the provision of software and changes in the nature of the services(Borang and Sarma, 2008). For example, all templates created based on information technology, from old data floppy disks to electronic databases with different status are found in the libraries. But the use of these infrastructures to facilitate the provision of services has been difficult. The use of CDs is the most frequent use of electronic resources of the libraries; and dissemination of information services at these centers is mostly in the form of document delivery services. Librarians believe that the failure in the use of information technology is related to the lack of training courses.

Studies conducted on the role of information technology in doing general and technical affairs of libraries have indicated that the most frequent use of IT by the users is related to the two areas of activities in the libraries; i.e. cataloging and provision of information(Jue et al., 1999). The most frequent use of information technology by the users is associated with the search for information,

storing and retrieving; and the main problem of users in using IT-based services is related to the lack of knowledge and sufficient education in this field(DiMaggio and Hargittai, 2001).

In addition to the emphasis on training the use of information technologies in libraries, which is one of the most important shortcomings noted in previous studies, the lack of a written policy is also considered as one of the main reasons for the non-use of information technology in the libraries. Keeping pace with changes in the field of hardware and software, leading to the changes in the nature of the types of information carriers, Libraries have started to provide different hardware and software facilities. But compiled instructions and targeting necessary to train users in this field and how to use these facilities have not yet been developed(Borang and Sarma, 2008, Lim, 2008, Teng and Hawamdeh, 2002).

One of the common obstacles in public libraries which is important in the use of information technologies, is the economic condition of countries and lack of appropriate funds to equip libraries in the field. There are (no) specialized and trained human resources with necessary skills in the libraries to promote the use of new tools, as well(Tapscott, 1996).

A series of studies have been conducted with a focus on public libraries in the Islamic Republic of Iran, based on different geographical areas. Carrying out a study on the universities libraries in Isfahan, Safahian reported that until 2004, 75.75% of libraries used computers to provide services to users(Safahieh and Asemi, 2010). Rezaeian has also studied Organization for Libraries, Museums and Documents Center of Astan Quds Razavi. Among positive effects of information technology, accelerated access to information was studied; and the analysis of data collected showed that the application of IT has a positive impact on the process of providing these services(Rezaiean, 2008). Muzaffarabad has also conducted a study with an emphasis on public libraries in the city of Shiraz. The results of this study showed that most of the hardware available in the libraries includes computers, printers and scanners; and the most frequent use of electronic resources is related to the books and magazines(mozafarabadi, 2013).

Methodology: In the present study, examine the status and describe the features and IT-based capabilities in the public libraries of Art and Cultural Organization of Tehran Municipality; and a structured questionnaire was used to collect data. The statistical population included 80 public libraries. Due to the low number and availability of the samples, no sampling method was used and the entire statistical population was considered for the study. To prepare the questionnaire, the previous studies were analyzed. After identifying research variables and initial setting of tools, designed questions were approved by six relevant experts and distributed among six executives of the library in order to assess the validity of the study. Then, those questions identified by them as

unclear or in need of amendment, were reviewed. To calculate the reliability, the questionnaire was distributed among six library managers on two occasions at an interval of two weeks; and the results were analyzed using Cronbach's alpha. The obtained coefficient (98%) showed good reliability of the research tools. Then the questionnaire was distributed among administrators of the studied libraries. After collecting the initial data and encoding them, descriptive statistics method was used to analyze data, and Excel 2007 was used for diagramming.

Results:

Based on chart 1, Most of the cultural libraries have been established from 1990 onwards; and an average of one library has been established each year. According to table 3, the distribution of the number of librarians working in each library is different concerning the assessment and grading conducted based on a set of quantitative and qualitative elements. Females' contribution in the management of these centers was more; so that only 36.25 percent of the managers of studied libraries were male. From among a total of 80 library directors, only 20 percent had non-library education; and in other cases, librarianship and information graduates were engaged in the managerial positions of these centers.

Chart 1: Time trend of public library establishment by art and cultural organization of Tehran municipality from 1981 to 2016

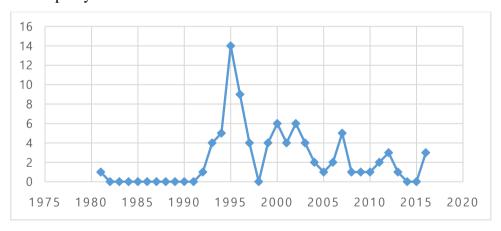Table 2: Gender frequency of libraries management in art and cultural organization of Tehran municipality

Gender	Frequency	Percentage
Male	29	36.25
Female	51	63.75

Total	80	100

The first research question:

Among the studied computers, printers, scanners and barcode readers are available and used in all these libraries. From among older hardware, fax, voice recorder, TV, CD and DVD players and Xerox devices were ranked next, respectively. Only in a library, there was a Braille printer, while there were five libraries active in the field of the books for blind and visually impaired people. Examination show that all libraries use Internet to conduct their services. However, due to the availability of a web-based software provided for the integration of library services, it is necessary for these centers to have access to Internet for providing technical services and circulation resources. An integrated library software accelerates and facilitates the conduction of library affairs. Among the most obvious network-based services is the activities related to the focused union cataloging which makes economic savings and optimizes the use of staff to provide services in other parts of the library. In 40% of the libraries, in addition to printed materials, other forms of information are provided. Also, in 12.5 percent of all libraries, there is the possibility of access to e-books on different format; and only in 1.25 percent of libraries, there is the possibility of access to full-text electronic databases.

Table 3: IT infrastructure in the public libraries of Art and Cultural Organization of Tehran Municipality

IT infrastructure		IT based services and infrastructures									Electronic Sources			
		Internet	OPAC	Union Catalogue	Web2.0	Social media	RFID	Teleservices	Email and chat	Barcode	Audiovisual materials	Library website	Electronic resources	Database
Exit	Frequency	80	80	80	32	80	0	40	12	80	6	80	10	5
	percentage	100	100	100	40	100	0	50	15	100	7.5	100	12.5	6.25
	Frequency	0	0	0	48	0	80	40	68	0	74	0	70	75

Don't exit	percentage	0	0	0	60	0	100	50	85	0	92.5	0	87.5	93.75
Total	Frequency	80	80	80	80	80	80	80	80	80	80	80	80	80
	percentage	100	100	100	100	100	100	100	100	100	100	100	100	100

Disproportion between the use of internet based services and the number of library members is one of the most important shortcomings in this study. In most cases, internet are the most important tools used by the librarians; and it is not full allowed for the users to use them as a non-library search point.

While access to Internet is a key element of public libraries in the 21st century for free access to information, this service is rarely found in public libraries. Basically, libraries do not accept any responsibility for Internet access. Demand for the internet use can be one of the ways to attract clients or even earn money in the libraries.

The second research question:

One of the important results shown in Table 5 is the high number of users of information technology in the public libraries. In this field, searching in the libraries' catalog and databases is considered one of the most common uses. Despite the rate of 31.25 percent use of the current provided services, an ever-increasing demand for new IT-based services is the main demand of users in the public libraries. Despite users' familiarity with library-related technologies, emerging needs show that holding workshops in the field of library services based on these structures is effective in increasing the use of them.

Table 4: use of information technology by librarians and patrons in public libraries of Art and Cultural Organization of Tehran Municipality based on libraries management opinions

Use of IT	librarian		Users	
	Frequency	Percentage	Frequency	Percentage
Very high	13	16.25	4	5
High	37	46.25	23	28.75
Moderate	21	26.25	25	31.25
Low	6	7.5	21	26.25
None	3	3.75	7	8.75
Total	80	100	80	100

As Table 5, librarians' use of available technologies to carry out specialized tasks of the library as an information center, is at an acceptable level. The vast majority of all current activities such as cataloging, classification, circulation and borrowing the resources, as well as management of magazines and publications are carried out based on hardware and software provided.

The third research question:

According to the viewpoints of the managers of the studied libraries, the use of an integrated web-based software system has enormous positive impacts on facilitating the processes in various sectors. Librarians have been trained to use these facilities and acquired skills to use the information technology. One of the factors effective on the increased use of related technologies in the libraries is to provide, establish and use more of this equipment. Table 7 shows the most striking results of the use of information technology obtained following the integration of library software at all libraries, which is accelerated and easy process of cataloging the sources with the highest possible accuracy. In this process, each source is fully cataloged once, and when necessary, other libraries prepare another copy based on that catalogued source.

Table 5: use of information technology in the delivery of public services in libraries of Art and Cultural Organization of Tehran Municipality

IT based services	Exit		Don't exit		Total	
	frequency	Percentage	frequency	Percentage	frequency	Percentage
Document delivery services	20	25	60	75	80	100
Interlibrary loan	80	100	0	0	80	100
Indexing and abstracting services	0	0	100	100	80	100
Chat services	6	7.5	74	92.5	80	100
Current awareness services	3	3.75	77	96.25	80	100
Selective dissemination of information	1	1.25	79	98.75	80	100
Scanned copies	3	3.75	77	96.25	80	100
Bulletin board services	5	6.25	75	93.75	80	100
Electronic services	6	7.5	74	92.5	80	100
Digital library	1	1.25	79	98.75	80	100

As far as the public services and training the users are concerned, activities defined for libraries are exclusively focused on users' familiarity with software used in the libraries, with an emphasis on methods to achieve bibliographic information contained in the union catalog of the related libraries. In this regard, holding formal or informal workshops in conjunction with the empowerment of users to perform research is one of the existing shortcomings. Despite the fact that carrying out research projects is not considered a priority by public libraries, the eye-catching referral of members who are enrolled in graduate studies, has caused public libraries to plan for access to different Persian and international scientific databases. In this case, users must have the ability to search and retrieve information in sharing systems which has been specifically taken into consideration by the authorities of libraries.

A significant point about the use of information technology for librarians is the use of services supplied to users in the form of opportunities that have arisen in the present century. Provision of services that can be generally called distance or unattended library services is much lower compared to the face-to-face services. While network-based services integrated between libraries are provided for all users in different ages through defining username and password; users only have the option to search and locate information resources and extend the borrowing period of documents in their hands. In this context and considering the infrastructure provided, in case of the supply of skilled manpower as glorious librarians, it will be possible to provide services such as document delivery, etc. Provision of such services saves users time and money; and is effective in reducing many major problems, such as traffic and air pollution in Tehran.

Conclusion:

Concerning the results of the present study, the status of libraries is. The status of the availability of audio books (7.5 percent), e-books (12.5%) and electronic full-text databases (1.25 percent) in these libraries indicates one of the weak points of these centers.

About the use of electronic resources, all libraries have access to articles; but as far as other information formats, such as e-book, are considered, there is a major weakness. Although 60 percent of the users of the libraries use the information technology-based services, still there are a lot of requests to increase the quality and quantity of equipment in this field.

Integrated library software used by the public libraries has led to the accelerated and easy conduction of technical activities and services in all these centers. For example, centralized cataloging through a

common system has led to the accelerated and easy technical services and prevention of wasting time and cost.

In general, it can be said that the advent of information technologies and taking advantage of them have put many things before the libraries. Given the importance of public libraries in the culture-building practices of the citizens, the results of the present study show that the hardware and software facilities of all public libraries affiliated to the Art and Cultural Organization of Tehran Municipality are in desirable condition. Librarians and administrators also have full satisfaction of their libraries being equipped with new technologies. The interesting point in this context is to conform the nature and form of the provision of services in public libraries to the needs of clients in different categories of sex, age and education.

Based on the results of this study, and in order to expand the use of information technology-based services in public libraries, following strategies and suggestions are recommended:

1-Development of written policies for the use of information technology in public libraries

2-Needs assessment and emphasis on the implementation of information technology infrastructures

3-Holding training courses for librarians and users to enhance their individual capabilities for using information technologies

4-Allocation of adequate funding to equip libraries with required information technologies

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