Dynamic Development of Information Technologies, Organization of Library Services Using Digital Space and Through Social Networks

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ABSTRACT
Starting with the creation of the global information space, there are two forces that can really influence information processes. The first side is the technological side, the other side is the state structures based on social and humanitarian issues. The creators of global networks and the owners of key technologies advocate that everything remains as it is, based on freedom of speech, and in humanitarian terms, states are trying to control this process based on the implementation of legislation. The first side is based on free speech, controls the advertising market and dodges taxes, the other side wants to deal with “concerned groups” and also fight social ailments. In this confrontation, libraries, as institutions influencing the information environment, stand next to the state and try not to lose their attractiveness. In this respect, libraries can act as a bridge between local and regional as well as global networks.

Libraries, academic and university libraries currently operating in the world and meeting modern challenges are the main participants in the authoritative information cycle. Coordinating the information activities of these agencies can lead to a significant improvement in the information environment.

The main goal of the study is to identify the optimal forms and methods of using social networks in libraries. It is also exploring the reasons why libraries use social media to ensure an effective and widespread information service.

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1. INTRODUCTION

If you pay attention to the history of mankind, you will notice that the inventions that form the basis of society are assessed by the impact created in the society. This economic development has led in society to the classification of eras as an agricultural, industrial and information society. The rapid development that emerged with the onset of the industrial revolution continues to this day \[1,2\]. Knowledge and information constitute the backbone of the information society. The fields of activity related to the collection, storage, processing, use and transmission of information in the information society constitute the backbone of the economy. Information, which is the main element of the information society, has already become an integral part of our life \[3\].

Looking at the definitions of the information society, it becomes clear that the production and consumption of information through information and communication technologies (ICT) is the backbone of the information society.

The information society is the main part of the information economy. The information society is a social structure in which people creep into high technologies, enterprises develop their strategies based on information and education, and everyone is open to information and learning \[4\].

Unlike other societies, the information society is a "subject-oriented" society. In other words, the most important element of the information society is human strength, which, through the efficient and skilful use of information, can transform information into social profit and production \[5,6\]. Each stage of development has its own specific structure of production forces. At each subsequent stage, new components of the structure that existed before are added. So, in an agrarian society, the structure of technological means of production includes: human physical capabilities, hand tools and natural factors. In an industrialized society, machines and electricity were added to this structure. And in an informatized society, new components are added to the existing structure, such as human knowledge, information technology and information. In the information society, information and network technologies free people from such conservative labor as collecting information, create conditions for them to work in various areas of data mining, and provide high-level services to customers \[7,8\].

The role of libraries in the modern state of society is growing. Libraries, academic and university libraries currently operating in the world and responding to modern challenges are the main participants in the authoritative information cycle. Coordination of the information activities of these agencies can lead to significant improvements in the information environment. It is important to identify the optimal forms and ways of using social networks in libraries. And also research the reasons why libraries use social media to provide effective and widespread information services.

2. METHODOLOGY

Of course, knowledge has always been important. However, the methods of receiving and servicing, as well as results and productivity, varied.

The rapid development of information and communication technologies has led to the emergence of the concept of operational availability of information, which, as a result of continuous monitoring of development, required in a short time the adaptation of enterprises and organizations to these technologies. Libraries, which seek to formulate various methods and tools to meet the needs of information users, and to organize the effective use of information in these ways, are among the most affected by this development, which is the foundation of information.

At present, dynamically developing information technologies influence the process of searching for information of users, as a result of which the needs of users are formed in accordance with information technologies. It also leads to changes in the formation and implementation of the information service of the library. This makes it necessary to introduce information services in new methods and forms. As you can see, the use of information and communication technologies leads to a change in the main function, structure, purpose of libraries, which ultimately increases the importance of libraries in society. That is why the introduction of modern electronic media into libraries is an extremely important issue.

The enrichment of library funds with modern information carriers, the use of the experience of the world's leading library and information...
institutions, the creation of electronic databases is one of the important tasks of our time. The events that took place in the country in the early 90s of the last century influenced the activities of libraries, and this led to the fact that their technical base was rather weak. After the relevant order of President Ilham Aliyev of April 20, 2007 "On improving the activities of libraries in Azerbaijan", libraries in the country were provided with technical equipment, the process of library automation was strengthened, and the introduction and use of new technologies in libraries began [9].

As a result of the application and use of new technologies in the library and information sphere in our country, conditions have been created for the creation of a modern library and information infrastructure, bringing the library and information services provided to users to the level world standards. It is known that every novelty made by the library is primarily aimed at the reader. In general, it is difficult to imagine modern library work without new information and communication technologies.

The use of information and communication technologies both in a number of spheres of human activity and in librarianship has led to the acceleration and automation of traditional library processes.

Obviously, the main goal of libraries is to ensure the highest level of information needs of users. To this end, libraries have recently been developing and providing information services that will increase the number of electronic resources. One of these tools is a social network.

3. RESULTS AND DISCUSSION

3.1 The Essence of the Problem

Many changes over the past decade have led to the fact that the concept of social networking has become an integral part of the life of each of us. Over time, social media has overshadowed not only books, newspapers, television, and in many cases even information sites, which were once the main sources of information. Nowadays, the influence of the Internet, social media, social networks and blogs on our daily life is inevitable. This influence is evident in the library field as well as in other fields [9].

One of the important indicators of an effective information service is the awareness of users about these services. For effective and widespread communication, social media is the most preferred medium. These tools are widely used both in one-to-one communication and in quick, easy and effective communication with groups that businesses and organizations see as their goals.

The use of social media as a widespread and effective means of communication has mobilized libraries to provide readers with information resources in the simplest, fastest and most cost-effective way. Currently, the social media environment is widely used to quickly and easily serve a larger number of readers in the promotion and marketing of library resources and services.

Social media use of university libraries is becoming more common every day around the world. In particular, the social media preferences of university students and the choice of such media, based on information technology rather than communication, contribute to the effective use of social media libraries to reach more users.

Currently, there is no library that does not have its own website. Along with these sites, libraries open their pages on social networks. These pages provide information about events held in libraries, post photos of events, videos, and users get acquainted with novelties in the library field, as information about new books received by the library is regularly posted.

Libraries increase their user base using social media, publish current news, conduct advertising and marketing services, communicate with them promptly, and also work in accordance with goals such as updating the image of libraries and accessing potential users, viewing user reviews and creating plans. Predictions based on these feedback, the formation of discussion groups and common business platforms.

Social media is defined as platforms that allow users to create and update content for their readers based on web-based applications and Web 2.0 technology. Social media originally emerged for the purpose of creating images, communicating with internet users, and sharing images.

Andreas Kaplan and Michael Haenlein introduce social media in the following way: "Social media is an Internet application that is designed to create and share user-generated content using the ideological and technological 2.0 website
techniques.” Social media is the creation of social communication and information exchange between people through virtual Internet tools. Social media transforms communication into interactive dialogue using web technologies.

The emergence of the concept of social media can be attributed to changes in web technology. With the aim of connecting computers on campus, the Internet was founded in 1960 and has developed rapidly with Web 1.0 and Web 2.0 technologies. While Web 1.0 consists of a one-way communication environment where interaction does not exist, the main elements are social networks, with Web 2.0 users have become not only viewing publications, they have also become active user groups. Thus, users can now comment and rate posts, receive positive or negative reviews from other users, or influence the user’s opinion. Social media includes information sites, social networks, blogs, micro-blogs, instant messaging programs, forums that are broadcast over the Internet.

When we look at the historical process of the creation and development of social networks, we see the chronological stages of its development [10]:

1994 the first social network “Geocities” was created. 1997 we created the website “SixDegress” which allows users to create profiles and add to their friends list. 2001 “Cyword and Ryze” was created. 2002 created ”Fotolog” and ”Frienster”. In 2003, we created Pace Myspace and created the professional social network LinkedIn for the business world. In the same year, the virtual applications ”Second Life” and ”Deiicio.us” were created. In 2004, Harvard University students created Facebook. 2005 created ”Youtube”. In 2006, ”Twitter” was created and Facebook was opened for world users. 2007 founded Tumbler and Friendfeed. In 2008, Facebook became the leader among social networks. And in 2010, the social network “Instaagram” was created.

Due to the ease of use of these social networks, the number of their users has increased. Thus, these sites have recently become an important tool for companies and organizations that see this user potential in social media, striving to reach a wide target audience quickly, easily and at a lower cost. As we have noted, the widespread use of social media in different contexts also encompasses universities and university libraries [10]. Academic libraries were encouraged to use social media as an opportunity to disseminate information services, user services, new publications and announcements. Thus, the social network provides many opportunities for libraries:

For example, social media, which allows the provision of services through location-independent profiles, allows users to interact with users and improve services related to various sections of the library [11].

Readers using university libraries are known to have innovative thinking. That is why university libraries work in social networks to meet the dynamic needs of their readers, to provide access to information services for users through innovative technologies [12].

University and academic libraries use social media for a wide variety of purposes and forms. The service offered to readers influences the choice of social networks.

Libraries have used the following as targets for using social media:

1. Bringing information to current users
2. Providing reference services to the reader individually and promptly.
3. Attracting potential users.
4. Provide users with the latest news and novelties.
5. Ensure mutual exchange of information between readers about new publications or hot topics by creating discussion groups
6. Organize communication between librarians to follow professional innovations
7. Modernization of libraries and information centers, in accordance with the requirements of the modern period
8. Serving readers in a more fun environment
9. Social media shows that they are used to provide effective communication between readers and libraries to improve library services [13. p.67].

3.2 Azerbaijan Experience

The use of social media platforms to promote library resources and services to academic needs is growing day by day. It should also be noted that as a result of the research it became known that the most popular social media tools in university libraries are Facebook (62.9%) and Twitter (62.9%).

A lot of research has been done on the use of the Internet and social networks, the
development of information and communication technologies, and the results of this research are constantly published in the society in the form of reports. According to the 2018 international digital report published in this area, the number of active Internet users in the world exceeds 4 billion - 53 percent of the total world population use the Internet. Compared to last year, users of social networks increased by approximately 1 million and reached 3.2 billion. This means that every 3rd out of 4 Internet users are social media users. 90% of these users use the social network via mobile phones. In 2018, the most popular social networks were Facebook - 2.23 billion users, Youtube - 1.5 billion users, Instagram - 800 million, Tumblr - 794 million and Twitter - 338 million users.

As can be seen from statistics, the Internet and social media have become an integral part of the life of members of society, the use of which is constantly growing. It is also noted that recently there has been a noticeable increase in the use of social media by university libraries in Azerbaijan.

At the moment, there are 51 higher educational institutions in the country, of which 40 are state and 11 are private. In 2018/2019, 171104 students study in Azerbaijan, of which 157662 are undergraduate students and 13442 are graduate students. The country uses an information service in 4 languages - Azerbaijani, Russian, English and Turkish. We can say that the most leading state and non-state universities in the country have high attractiveness. In general, it should be emphasized that the social media environment is more widely used in public universities.

The challenges posed by the 2020 pandemic have made it easy for many countries around the world to switch to distance education. A distance learning process has been introduced in Azerbaijan in a short time. Thus, the country had the appropriate tools for this. In the country, both the academic community and education participants have switched to distance learning and remote consumption of information. Libraries have adapted to this process and have expanded the "remote" information service in a short time.

4. CONCLUSION

Through social networks, specialists of the electronic library have the opportunity to bring their library collection to the market and provide a high level of service to readers, broader contacts with users and attract new users, and receive the desired information about services. Therefore, the effective use of social networks in digital libraries is considered appropriate. These results indicate that advocacy through social media is now among the needs of the era and is an important place for libraries and librarians when compared to traditional media.

Libraries continue to maintain their authority in the global information space, especially on social media. When consumers come across addresses of libraries and information institutions, they trust them and willingly contact them. Libraries need to leverage this trust to expand their reach, increase the depth of their content, and be an active participant in the advertising market. Regional and global industry organization and corporate coordination of libraries that are active participants in the information market can be very helpful in this regard.

5. RECOMMENDATION

As a result of the analysis of the above, the following conclusions can be drawn:

- It is an important tool for promoting and publicizing the activities of libraries.
- Social media promotion is more effective than traditional advertising.
- The use of social media has a positive effect on the development of libraries and is highly regarded by librarians.
- Effective and functional use of the media creates a social image, the image of the library in which it is technologically advanced.
- Facilitates the relationship of libraries with the target audience.
- This creates conditions for better satisfaction of users’ needs and, accordingly, more efficient delivery of services.
- Libraries are using social media to create demand for library services.
- Provides efficient payment for social media services.
- Possibly a more efficient consulting service.
- Increases efficiency in library service.
- Effective custom training can be given to many users.
- Social media is an effective tool in defining short-term service strategies based on customer feedback and long-term services.
Provides an opportunity to show the efficiency of library services.
- On the other hand, it provides users with capabilities such as database creation, analysis and reporting in order to improve library service.
- Mass media should be the main, important element of the library service planning process.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES


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