

The Role of New Technologies in Forming Libraries in the Global Information Society

UDC: 316.42

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Abstract

Technological progress in the trend brought many changes in library and information services, as well as about social expectations by librarians/experts on information issues. Thus, it is very important that the librarian/information specialist changes with the system, ensuring the updating of knowledge and skills, as well as the use of new web technologies in the provision of library services. Based on this fact, this document is trying to determine global and trending problems, as well as new technologies for library and information sciences so that readers can specially focus on them for effective library services.

While specialists in the field of analysis of modern library and information activities make pessimistic forecasts about the future of this activity, it is noted that new opportunities are being created using the latest technologies. The competence of specialists engaged in library and information activities should allow the implementation of the required types of services in a wide range of areas through the introduction of new information processing technologies.

The presented article puts forward proposals for the creation of new areas of library service along with traditional service, going beyond it, using modern information and communication technologies, and assigning a special place to these areas in the training of specialists.

The article deals with the issues of training and professional use of tools that are important in the field of expanding library activities, from the means of communication that are widespread in the modern era, especially in social networks. For this, it is also very important to analyze new fields and "directions" from the point of view of training experts in this industry.

Modern directions of library and information activities and the use of innovative projects in the organization of new information services are currently very relevant. We consider it very important to study studies that attract the attention of specialists in this direction.

Keywords: global trends, new technologies, library and information science

Роль нових технологій у формуванні бібліотек у глобальному інформаційному суспільстві

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Анотація

Технологічний прогрес у цій тенденції приніс багато змін у бібліотечні та інформаційні послуги, а також у соціальні очікування бібліотекарів/експертів з питань інформації. Тому дуже важливо, щоб бібліотекар/інформатик змінювався разом із системою, забезпечуючи оновлення знань і навичок, а також використання нових веб-технологій у наданні бібліотечних послуг. Базуючись на цьому факті, цей документ намагається визначити глобальні та актуальні проблеми, а також нові технології для бібліотечних та інформаційних наук, щоб читачі могли спеціально зосередитися на них для ефективного бібліотечного обслуговування.

Хоча фахівці в галузі аналізу сучасної бібліотечно-інформаційної діяльності роблять песимістичні прогнози щодо майбутнього цієї діяльності, зазначається, що за допомогою новітніх технологій створюються нові можливості. Компетентність фахівців, які займаються бібліотечно-інформаційною діяльністю, повинна дозволяти реалізацію необхідних видів послуг у широкому спектрі напрямків шляхом впровадження нових технологій обробки інформації.

У представленій статті висувуються пропозиції щодо створення поряд із традиційним обслуговуванням нових напрямків бібліотечного обслуговування, виходу за його межі, використання сучасних інформаційно-комунікаційних технологій та відведення цим напрямом особливого місця у підготовці фахівців.

У статті розглядаються питання навчання та професійного використання інструментів, важливих у сфері розширення бібліотечної діяльності, із засобів комунікації, які широко поширені в сучасну епоху, особливо в соціальних мережах. Для цього також дуже важливо аналізувати нові галузі та «напрямки» з точки зору підготовки фахівців у цій галузі.

Сучасні напрями бібліотечно-інформаційної діяльності та використання інноваційних проектів в організації нових інформаційних послуг наразі є дуже актуальними. Вважаємо дуже важливим вивчення досліджень, які привертають увагу фахівців цього напрямку.

Ключові слова: світові тенденції, нові технології, бібліотечно-інформаційна наука

Стаття надійшла / Article arrived: 25.03.2023

Схвалено до друку / Accepted: 28.04.2023

Introduction.

The global and national economies are now knowledge oriented. Based on this, the exchange of knowledge has become an invaluable asset for further economic development. Local and international businesses are now greatly benefiting from library and information science in terms of acquiring new ideas, knowledge and information needed to grow their businesses (Xalafov, & Ahmadov, 2022). Also, professional services provided by librarians help in the acquisition and use of information resources, especially those related to electronic resources, in many cases by researchers, students, as well as in finding sources of information.

Research Method.

Indeed, the availability of libraries was cited as an important space for addressing the issue of moving to a specific locality and the strategic location of useful infrastructure. Research has shown that business information resources are more valuable with hands-on support from library staff (Kazii, 2014). In addition, modern democracy is a world experience, and many programs for the development of the national economy require the broad masses and people in power to be well informed on all important issues of society. While many receive information in schools and seminars, they are not without the support of libraries and information centres. Libraries and information centers are indispensable places for formal education. The library should provide all age groups with the opportunity to be aware of the information they need in a certain period of time on all issues. The computerization of a library is a time- and financial-resource-demanding process that results from the collaboration of highly qualified librarians, information specialists, and good organizational work.

This is done by providing them with information that represents controversial points and allows them to form their own opinion and maintain that attitude of constructive criticism leading to public affairs. According to the UNESCO "documents" (1961), there will always be changes in the environment and these changes will affect librarians and information professionals in terms of role, employment, self, motivation and even survival. Thus, data scientists must respond to these changes in the environment and trends through timely actions and roles. These are now changes in the development of information and communication technologies and telecommunication networks, and we live in an information environment where the skills necessary for all professions and the skills necessary for the information profession are not being released (Qurbanov, & Kazimi, 2018). The current technological age is accompanied by a rapid growth in the exchange of information with a corresponding acceleration of knowledge and skills. This new library and information science environment requires new skills, products, equipment, and platforms for finding, processing, and distributing information.

The Essence of the Problem.

Current and global trends in library and information science are creating a new agenda. First, it is appropriate to identify some of the trends discussed in the recent library and information management literature. These current trends will somehow be connected with the formation of library and information services in the new economic era. As shown in the literature, these trends are summarized as follows:

- Organization of assessment/competency trainings
- User-centric approach to service delivery
- Coming to terms with the globalization of information
- Growth of electronic/internet resources (commentary)
- Information management should be based on an important method
- Implementation of integrated and widespread ICTs
- Knowledge management / Availability of use of the organization
- Promoting the knowledge-based economy
- Teaching leadership skills
- Professionalism of librarians and readiness for changes in the digital environment
- Librarians are presented as "cyberlibrarians".
- Acquisition of new managerial knowledge and skills of librarians
- The need for an information management system (IMS).
- Raising a new generation of information technology professionals (CIOs, CKOs, consultants and analysts)
- Increasing role of digital/electronic/virtual library
- Organization of specialized training in library and information management (double degree - basic concept)
- Deepening strategic alliances, partnerships and collaborations (Jagdish, 2018; Barathi, Loganathan, & Rajan, 2017). To facilitate access to information, it is important to develop digital content and organize "tenders" for this. In addition, an important factor in the provision of information services is the organization and use of digital, virtual libraries (Kazimi, 2021a).

Digital Library. The Digital Library is a specific platform where all text and audio books are stored as digital files, which can take a long time to access. A digital or virtual library is an online access provided by other means or can be considered a website that offers links to various sites with an extensive data repository in a catalog, archiving area. The term can also be associated with all searchable material available on the internet on any topic. A digital library is usually defined as a network with connections to other libraries. It is a library in which a significant portion of the resources are available in a machine-readable format using computers. The digital library and virtual library are used to present a vast collection of information that is widely available to people. Librarians and information professionals of the new age must be able to manage this digital information system, as it is necessary for their general

competencies (knowledge, skills and attitudes) to receive and disseminate digital information. Traditionally, libraries are an information space that includes books, manuscripts, journals, and other types of documents. In the new economic era, new technologies are available in library services.

New technologies provide an opportunity to facilitate and promote user-centric services and collaboration between libraries and their users. These include issues such as library services and the creation of "new resources" and existing users using "collective intelligence". The availability of technology allows libraries to offer improved services that meet the needs of clients. Since the web is the dominant mode of communication, transactions and consumption, it touches every aspect of human life. The web environment has become the main and important factor in meeting the information needs of human resources. Higher education is one of the main directions in the development of human resources, it must be able to work with new technologies to overcome the unattainable and gaps. Libraries are the center of higher academic institutions, always playing a leading role in disseminating knowledge among scholars with a range of services (Kazimi, 2021b). There are many problems and opportunities for specialists in the field of libraries of higher educational institutions in the field of electronic resources and improving the information environment.

The following are important tools and techniques used for the evolving library environment, according to experts:

Instant messaging (IM) technology is a type of online chat that allows real-time text transmission over the Internet or other computer network. Messages are typically transferred between two or more parties where each user enters text and initiates a transfer to the recipient(s) who are all connected to a common network. It differs from email in that instant messaging conversations happen in real time (hence "instantly"). Most modern instant messaging apps (sometimes referred to as "social messengers", "messaging apps" or "chat apps") use push technology and also add other features such as emoji (or picture emoji), file transfer, chatbots, voice over IP or video. chat options.

Instant messaging systems tend to facilitate communication between certain known users (often using a contact list, also known as a "buddy list" or "buddy list"), and can be standalone applications or integrated, for example, a broader social media platform or website where it can be used for conversational commerce, for example. IM can also consist of conversations in "chats". Depending on the instant messaging protocol, the technical architecture can be peer-to-peer (direct point-to-point) or client-server (an instant messaging service center relays messages from the sender to the communication device) (Stielow, 1999; Saffady, 1999). It is usually distinguished from text messaging, which is usually simpler and usually uses cellular networks.

RSS FEEDS - This abbreviation stands for Really Simple Syndication and refers to the procedure in which information about sites of interest to you on the network appears on your computer.

For example, instead of visiting our site from time to time, you can have the news you are interested in automatically sent to you immediately after publication on the site. We offer RSS feeds of the latest posts from the UN News Center as well as several topical collections.

First, you'll need a separate aggregator program, often referred to as News Reader. It is she who displays the information coming from a particular site. After that, you need to specify the source for the program.

There are many such programs. We suggest using the Google site link listing the most popular products. Many of the programs are distributed free of charge. Keep in mind that these programs are made for different platforms and operating systems.

HTML Channels. To become a modern web developer, you need to learn HTML, CSS, and JavaScript. Web developers need ready-made libraries, various programming languages and web development tools when advancing in web development. In the world of web development, where there are so many topics to learn, it's important to get the right information from the right places. One of the biggest sources of information, YouTube contains countless web development related content. Due to problems such as the lack of systematic content and the poor quality of some materials, we have checked the YouTube channels for you. In the course of this article, the top 10 YouTube channels and content were studied for development.

Streaming "media" is the sequential delivery of multimedia content over a computer network, played back to the end user as it is delivered by the provider. Streaming video and audio is an important application that predates the Internet and has also found its way onto the Internet. The presence of computer and network infrastructure, multimedia, library manuals, static textbooks presented on the Internet are being transformed into multimedia interactive textbooks. Some tutorials use flash programming, screencasts, or audio or video streaming, and combine an operator presentation with an interactive quiz; users answer questions, and the system responds positively. In addition to their applications in machine learning, textbooks were the first library applications to move into a more socially rich network that would also include streaming media in its collections. As media is created, libraries will be responsible for archiving and making it available. Libraries are already beginning to explore the possibility of providing such digital asset management technologies.

A "podcast" (Podcasting) is either a single audio file or a regularly updated series of such files published on a single Internet resource with the possibility of a subscription. A podcaster is someone who engages in podcasting on an amateur or professional basis.

A podcast terminal is a site that hosts media files and automates to some extent the sending of updates and subscriptions. It is a type of social media that is similar in technology to video blogs and internet radio. In addition to audio and video recordings, it may contain a recording of speech in text form.

A podcast client (podcast manager) is a special program for listening to podcasts. The most popular apps in the world are Apple Podcasts (pre-installed podcast client for iOS, iPadOS and macOS), Spotify, Pocket Casts, Google Podcasts, Overcast, Castro, and others. They provide the same basic functionality but may differ in interface and additional features (Kazimi, 2021a).

With podcast managers, you can subscribe to podcasts, get notifications of new episodes, download podcast episodes for offline listening, set up automatic episode downloads, adjust the playback speed of podcasts without speech distortion. In addition, podcast clients can automatically cut pauses in speech, play intros at the beginning and end of podcasts, organize episodes into playlists, enhance speaker voices, and synchronize playback across devices.

Vodcasting: "VOD" in Vodcasting stands for "video on demand". It's the same as podcasting. While Subcasting is used to deliver audio files, Vodcasting is used to deliver video content. Like podcast content, Vodcasts content can be used on both a laptop and a Media Assistant (PMA) device.

SMS Request Services: Short Message Service (SMS) is a connection transfer mechanism in mobile networks. Library SMS requests allow patrons to use their mobile phones to send requests to the library. Those who make such requests receive an immediate response.

Blogs. A blog is a website, usually maintained by a department, with regular commentary, event descriptions, or other material such as graphics or videos. Notes are usually arranged in reverse chronological order and are generally considered handy publishing tools. Blogs provide an opportunity for a person or group of people to post content or comment on it. Technologically, blogs are easy to use, platform independent and available online via the Internet. Generally speaking, blogs are online factories with thousands of blogs maintained by subject matter experts willing to share their knowledge, ideas, and opinions with others. The most obvious use of library blogs is promotion, advertising, etc. as a service tool (Kazimi, 2021c). Libraries can distribute information to their users, and blogs announce new resources and events. Blogs can be used to facilitate discussion and interaction between users and staff. In addition, the use of library blogs can be encouraged to allow the library and users to get to know each other and interact on a personal level.

Wiki. A wiki is a set of web pages designed to allow anyone who accesses it to authorize or modify content using a simplified markup language. Wikis are often used to create collaborative sites and maintain community websites (Wikipedia 2008). For example, Wikipedia.

Wikis are also used by enterprises to provide accessible and efficient intranets and for knowledge management. A wiki, in essence, can be equated with opening web pages where a registered user can publish, supplement, modify and modify it. As with blogs, wikis are not as trusted as traditional sources. However, their value as a source of information cannot be underestimated. Libraries can use wikis as a communication tool to provide social interaction between librarians and visitors. Users will be able to share information, ask and answer questions, and librarians can do the same on the Wiki. Moreover, the record of these transactions can be archived forever. A transcript of such an answer session question will serve as a resource that the library can provide as a link. In addition, the Wiki will eventually evolve into a multimedia environment in which both synchronous and asynchronous audio and video collaboration will take place.

Social media. The social networking service is a web application that facilitates the creation of virtual social networks for people who share interests and activities or who are interested in learning about the interests and activities of others. Most social networks, most of the user community, the user community is chat, messaging, email, video chat, file sharing, blogs, discussion groups, etc. While Facebook and WhatsApp enable users can share with each other (detailed life and personality profiles of users), YouTube allows users to share videos on the web. Social networks allow librarians and visitors not only to interact, but also to dynamically share resources and resources in an electronic environment. Users can create an account using the library's online service, share information about other users' needs, and recommend resources to each other. In addition, libraries can recommend opportunities to users across the web based on similar profiles, demographics, previously available resources, and a wealth of information provided by users.

Tagging. TEG is part of the data. (image map, blog post, video clip, etc., and search data.) Tags are usually informal and chosen personally by the author/creator or their consumer/audience/community. Tags are typically computer documents, web pages, digital images, etc. used for sources such as Cataloging is a fundamental skill of librarians, The user can identify and classify information based on their perception of that piece of information. In the library, users can register the library's collection and thereby participate in the cataloging process. The library catalog will allow users to keep track of both standard, standardizing and intervention users, whichever is more convenient or makes sense to the user. This label directory acts as an open directory.

Social bookmarking is a way to store, organize, search, and manage website bookmarks using descriptive metadata. In the social bookmarking system, users can save links to web pages they wish to save and/or share links with other users. These bookmarks can be public or conservative, or only available to those people or

groups of people. Authoritative people can usually view these bookmarks chronologically by category or tag, or by searching. Most social bookmarking sites encourage users to informally organize their bookmarks using an informal tagging system instead of a traditional folder, although some services use categories/folders/or a combination of folders and tags. These services also allow you to view bookmarks associated with the selected tag and enter information about the number of users who have added bookmarks. Some social bookmarks infer tag relationships to create tag groups or bookmarks. Candidates can use RSS feeds for social bookmarking sites using topics or related areas of specialization.

Conclusion.

The information landscape of the information paradigm creates many new ways for librarians to deliver services using new web technologies that will

automatically access new fields to bridge this gap. New trends and challenges in new technologies create "challenges" not only for library and information professionals, but also for users, visitors and scholars, and the publishing community (Kazimi, 2017). Indeed, the new environment adds a lot of unparalleled features and capabilities, and curiously, if we know how much we will use them, we see that the possibilities are many, and most of them are even free. New technologies provide librarians with unique opportunities to facilitate and promote user-centric services and collaboration between libraries and their users in this digital age. Adapting to some of these trends and introducing some new web technologies will likely improve the reputation and status of libraries in the community. These new services and ongoing changes are likely to enable libraries to improve further.

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