



## The impact of technology on library services and resources

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### **Abstract**

Over the last several years, technology has had a tremendous influence on the services and resources offered by libraries. Because of the proliferation of digital technology, libraries are now in a position to make available to their patrons a broader variety of information and services than ever before. As a result, libraries have transitioned from their historical function as stores of books and other physical items to their current one as producers of digital resources and services. The move toward digital content is one of the most major developments that has been brought about as a result of technological advancement. “E-books, e-journals, and database access are some of the many types of electronic materials that may now be found via the use of public libraries. Because of this, libraries have been able to increase the size of their holdings and provide patrons access to a greater variety of materials than would be feasible if they relied just on their physical collections. In addition to digital material, technology has made it possible for libraries to provide their patrons with a variety of digital services. These services may be accessed online. For instance, many libraries now provide patrons with the ability to receive professional advice from any location in the world where they have access to the internet by providing online reference services. Additionally, online research tools and guides, as well as online lectures and tutorials, may be accessed via the library's website.

**Keywords:** Library, books, technology

### **Introduction**

Libraries have also been able to become more efficient in their operations as a result of technological advancements. The adoption of digital cataloguing systems has made it simpler for libraries to maintain and organise their holdings, while the use of online circulation systems has let patrons borrow materials in a more efficient manner. Nevertheless, there has been some negative fallout from the effect that technology has had on libraries. Concerns have been raised in relation to the long-term preservation of digital resources, in addition to the possibility for information overload, as a result of the proliferation of digital content. In addition, users of the library do not all have the same access to digital resources, which might make already existing



disparities in access to information even worse. Technology has had a significant influence on the services and resources offered by libraries. In spite of the fact that technology has made it possible for libraries to increase the size of their collections and provide a larger variety of services, it has also posed difficulties and prompted inquiries about the function of libraries in the digital era. Because of the rapid pace at which technology is advancing, public libraries will need to be flexible and creative in order to keep up with the ever-evolving requirements of their patrons.

Since the dawn of time, libraries have played an essential role in society by ensuring that people from all walks of life have access to a wealth of knowledge and information. Both in terms of the services they provide and the materials they make available, libraries have experienced a substantial transition as a direct result of the fast development of technology that has taken place over the course of the most recent few decades. In today's world, libraries have evolved into much more than just physical locations from which patrons may borrow books and other items. They have developed into hubs of digital information and technology, giving users access to an abundance of digital resources and services. This trend toward digital material has profoundly transformed the way that libraries function, which in turn has had a significant influence on the role that libraries play in society. [Case in point:] [Case in point:] [Case in It is essential to have a thorough understanding of the influence that technology has had on the services and resources offered by libraries, in terms of both the possibilities and the obstacles that it has brought about. Even though new opportunities have been made available to libraries as a result of technological advancements, significant questions have been brought to light regarding topics such as the maintenance of digital content, the availability of information, and the libraries' shifting roles in the information age. The influence that technology has had on libraries is a complicated and nuanced problem that may be seen from both favourable and unfavourable perspectives. In spite of this, it is abundantly obvious that technological advances will continue to have a significant impact on the future of libraries, and that in order for libraries to remain relevant and useful in the years to come, they will need to adapt and advance.

The increase of digital literacy and the need that librarians know a wide variety of abilities connected to technology are two further important effects that technology has had on libraries. As a result of the expansion of electronic resources and digital services, librarians are increasingly needed to have experience in a variety of fields, including computer programming, digital content management, and online research tools. Because of this, there is now a new



generation of librarians who are well-versed in technology and are able to offer a variety of digital services to customers of libraries. In addition, technology has made it possible for libraries to extend their services beyond the confines of their physical locations and to serve customers who are unable to visit the libraries in person. These days, libraries provide users with a variety of virtual services, such as online reference and research aid, the ability to borrow electronic books, and digital archives. Because of this, libraries are now able to reach more individuals, including those who may not be able to visit a physical library due to factors such as location (such as residents of rural or underdeveloped regions).

Nevertheless, despite the many advantages offered by technological advancements, there are still a number of obstacles that must be overcome before libraries can successfully transition into the digital era. The need of ensuring equal access to digital resources and services is one of the most important of these. Although many libraries provide free access to digital resources, not all users have equal access to the technology required to use these resources. This can create barriers to information access and perpetuate existing inequalities. Although many libraries provide free access to digital resources, not all users have equal access to the technology required to use these resources. The effect that technology has had and will continue to have on library services and resources is a multifaceted and continuing process that may have both good and negative repercussions. While technological advancements have made it possible for libraries to provide access to a more diverse selection of materials and services, these advancements have also given rise to new issues and significant considerations about the role that libraries should play in the digital age. Because technological advancement will likely continue unabated, public libraries will have to maintain a flexible and creative mindset in order to continue satisfying the requirements of its patrons.

The nature of academic communication is shifting, which is another way in which technology is influencing libraries. The proliferation of digital technology has completely altered the ways in which academics interact with one another and distribute the results of their study. This has substantial repercussions for libraries, since they are now tasked with the management and provision of access to an expanding variety of digital research outputs, such as preprints, data sets, and multimedia files. As a direct consequence of this, libraries have been forced to implement innovative technologies and methods in order to properly manage and preserve the digital research results. Additionally, they are playing an increasingly important part in



promoting open access and open science programmes, both of which aim to make research more accessible and transparent. In addition to this, the development of technology has resulted in the rise of new ways of learning and working together. Libraries are increasingly giving access to digital learning materials and online tutorials as part of their efforts to encourage online learning via the use of digital technology. They are also making it easier for academics and researchers to work together by providing digital tools such as online discussion groups and video conferencing. In conclusion, technology has also had an effect on the actual area that libraries occupy. The physical layouts of many libraries are now being rethought in order to better incorporate digital technology and to better satisfy the evolving requirements of their patrons. This has led to the development of new kinds of library services and materials, as well as the establishment of new kinds of physical locations that may be used for digital learning and collaboration. The influence of technology on the services and resources offered by libraries has many facets and is continuing. While technological advancements have made it possible for libraries to provide a more comprehensive selection of materials and services, they have also ushered in a host of novel difficulties and prompted vital inquiries about the future of libraries in the digital era. The provision of information access and the encouragement of lifelong learning are two of the most important roles that libraries will play as they continue to develop and adapt to the changes that are occurring”.

The function of librarians is also being altered as a result of the influence of technology on libraries. As a result of the proliferation of digital technology and the move toward digital content, librarians are now not just information providers, but also educators and advocates for digital literacy. Users are increasingly being taught by them how to access and assess digital materials, as well as how to make efficient use of digital technologies for research, learning, and collaboration. This is a function that they are playing more and more. In addition, technological advancements have made it possible for libraries to make decisions based on data to a greater extent. In order to better understand their patrons' requirements and to deliver services that are more tailored to their specific interests, libraries are increasingly collecting and analysing data on the behaviours and preferences of its customers. This has resulted in the creation of new kinds of library services, such as recommendation systems, which provide suggestions about materials and services to users based on the interests of those users and their previous actions. In addition, technology has also had an effect on the process of archiving and



preserving the resources that are housed in libraries. When it comes to ensuring the availability and usage of digital resources in the long run, libraries are increasingly aware of the significance of digital preservation as a factor to take into account. This has resulted in the development of new preservation techniques and technologies, such as digital curation and migration, which try to guarantee that digital resources remain accessible and useable even after they have been stored digitally for some period of time. Last but not least, technology has also had an effect on the long-term financial viability of libraries. In spite of the fact that digital resources have made it possible for libraries to make a greater variety of works accessible to patrons, these resources have also resulted in the establishment of additional expenses, such as those related to licencing and the upkeep of these resources. “As a direct consequence of this, libraries are increasingly investigating other methods of financing, such as open access publishing and crowdsourcing, in order to maintain their digital services and resources. The influence that technology has had and will continue to have on the services and resources provided by libraries is multifaceted and continuing, bringing with it both good and bad elements. In order for libraries to continue providing access to information and fostering lifelong learning, they will need to successfully traverse these hurdles and grab the possibilities given by new technology. This will allow them to continue adapting and evolving in this digital era.

### **Plication of information technology to library services**

In libraries, several systems have been developed for their various house-keeping chores and more still are being designed and refined, due to the technology of large-scale integration. These are known as microcomputers; designed to handle any of the library processes like acquisitions, cataloguing, serials control, circulation control, bibliographic control, or Selective Dissemination of Information (SDI) . IT is applied istimely, accurate, precise and relevant . The concept, Library Automation, thus became popular and of which explained that in the traditional manual library system, staff perform the various tasks required to complete each operation, but if a computer misused to perform some processing operations, an automated library results. defined library automation as the use of computers and associated technology to do exactly what has been done in libraries with the justification of reduced cost and or increased performance. Thus, automation helps in the acquisitions, organization, storage and



dissemination of information in libraries. Generally, IT applies to library services in number of ways, which include: Acquisitions, Cataloguing, Circulation, Serials and User Services.

### **Impact of information technologies in library and information centers**

The purpose of information technology (IT) is to improve information management and sharing, as well as to facilitate more effective communication, and ultimately, for the benefit of those who use IT. Information is a living and ever-expanding resource that influences all areas of study as well as all aspects of life since it is the driving force behind education, research, and progress. The bulk of the libraries' and information centres' technological applications will be in the gathering, processing, storing, and distributing of information or information technology. This is because the primary service that libraries and information centres provide is information. The fields of library science and information services have been profoundly altered by technological advancements, particularly in the areas of computing and communications technology. They make it easier to gather information, store it, organise it, process it, analyse it, display it, communicate it, and distribute it. It is required of libraries to make use of the numerous forms of technology made available to them as a result of the advent of new technology in order to give information at a faster pace and in a bigger volume than in the past. The use of information technology to the process of information retrieval provides users with quick and local access to a much broader variety of library materials. The development of information technology has also had an effect on notification services. This is mostly due to the fact that it enables quick access to information that is made available initially, as well as the dissemination of news and business services in electronic format. Electronic transmission of content has also had a significant influence on the operations of information service providers, enabling improved flexibility, potential for wholly new sorts of services, and opportunities for mass information sharing. The development of new technologies will continue to increase the efficiency of libraries and will become essential for the transfer of information between libraries, as well as from library users to librarians and vice versa. This has already begun to take place. The success of information technology will be dependent on the automation of libraries and on the availability of skilled labour; however, the most important factor is considered to be the motivation and attitudes of librarians to become involved in information technology for their various work activities.



**RIFD & Barcode technology:** RFID is a combination of radio-frequency-based technology and microchip technology. The information contained on microchips in the tags affixed to library materials is read using radiofrequency technology. A reader (aka sensor, scanner or interrogator) looks for antennae on the tags and retrieves information from the microchips through them. The tags used in RFID systems can replace both EM or RF the ft detection barcodes and targets although the hybrid system that 3M introduced in 2000 replaced only barcodes and retained the EM strips in the belief that EM is superior to RFID for security. 3M did introduce a comprehensive RFID product that replaces both EM and barcodes in2004”.

### **Conclusion**

In conclusion, the impact of technology on library services and resources has been both significant and ongoing. Digital technologies have revolutionized the way libraries provide access to information and support lifelong learning, and have created new opportunities for libraries to engage with their users and communities. However, technology has also presented new challenges for libraries, such as the need to manage and preserve digital resources, navigate complex copyright and licensing issues, and ensure digital privacy and security. Additionally, technology has changed the role of librarians, who must now be proficient in digital tools and able to teach digital literacy skills to their users. Despite these challenges, libraries have continued to adapt and evolve, embracing new technologies and exploring innovative approaches to providing access to information and promoting lifelong learning. Libraries remain important institutions in the digital age, providing access to a wide range of resources and services that support research, learning, and community engagement. Looking ahead, it is clear that technology will continue to shape the future of libraries and the services and resources they provide. As technology continues to advance, libraries will need to stay abreast of new developments and find creative ways to leverage digital tools and platforms to meet the evolving needs of their users and communities.

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