

# Digital Transformation Readiness in Libraries: Insights and Implications

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**Abstract:** *With digital technology, libraries are transforming how they run and provide services to their users. This process is known as "digital transformation." The purpose of this paper is to shed light on digital transformation in libraries. It attempts to present a quick road map for successful initiatives that libraries might take in the transformation process. With regard to research methodology, a theoretical approach was used as the research technique for this study which involves doing a review of various publications, research papers, and studies published on this topic, but it focuses more on primary sources of information and the insight of other experts. The paper describes the five essential aspects that must be considered in order to successfully implement digital transformation in libraries. These components are regarded as the backbone of the transition process and must be used appropriately to avoid mistakes. The paper aims also at highlighting the barriers and obstacles which libraries may confront in the transformation process such as interoperability issues, community participation, intellectual property rights, and sustainability. Based on the implications of this study, libraries of various types must build a solid IT infrastructure and improve accessibility in order to effectively assist today's library users who demand access to knowledge and information resources remotely in addition to customized, engaging, and convenient digital experience.*

**Keywords:** Digital transformation; digital technology; information culture

## 1. Introduction

According to the library and information association CILIP (2023) any attempt undertaken by an institution or organization to incorporate new technology in the hopes of boosting efficiency or value is referred to as digital transformation. In today's world, every component of the knowledge and information supply chain is being changed dramatically by technology, from content creation

to research, selection, and data analytics. For these technologies to work, high-quality, properly structured information, data, and metadata must be readily available (Limani, Y., Hajrizi, E., 2019).

Digital transformation has been a widespread topic in the business sector for several years. According to Pengyu (2023) The application of digital, networked, and intelligent technology has given rise to the fourth industrial revolution-Industry since the beginning of the twenty-first century. Libraries, on the other hand, are no exception; they have been adapting to changing times as well as global digital change. They are constantly enhancing and improving their services, with an emphasis on increasing their users' ease of use and accessibility.

By implementing cutting-edge technology, libraries will be successful in their transformation to the digital age. According to Dobrica (2022) The implementation of a digital strategy is a vital component of effective digital transformation in libraries. This strategy should specify the library's approach to digital initiatives, such as the adoption of digital technology, the use of digital platforms/tools, and staff

training on new digital skills .Furthermore, libraries must focus on digital content development and curation, which entails maintaining a wide and vast collection of digital resources available via several channels, such as e-books, audiobooks, databases, and digital content and archives (Y. Xu, 2020). This increases user involvement as well as learning and knowledge-sharing. Additionally, the development of online platforms and portals, such as OPACs, mobile applications, and online learning management systems, has been critical to the success of libraries' digital transformation. These web platforms provide library users with a more customized, engaging, and convenient digital experience .Utilizing digital technologies such as AI, machine learning, big data, and IoT may also aid libraries in their digital transformation path. For example, AI may assist libraries with predicting analytics, finding patterns in user behavior and preferences, and delivering customized recommendations.

Partnership with other stakeholders considered an essential issue. In this regard, Makori (2016) conclude that the establishment of partnerships with other organizations and stakeholders is another crucial factor. This can assist libraries in using cutting-edge technology and maximizing resources to develop better digital services.

It is noticeable in the last few years that so many libraries have been successful in their digital transformation journey by implementing a digital strategy, creating and curating digital material, creating online platforms, adopting digital technology, and engaging in collaborations (P. Chen, S. Kim, 2023). These initiatives have converted libraries into user-centric, digitally-driven institutions with simple access to vast amounts of knowledge and information.

Dunlap (2008) states that the significance of digital technology for libraries is massive. Libraries are redefining how they operate and deliver services to their users as a result of digital technology. In order to be effective and relevant in the present digital age, libraries must embrace digital transformation. In fact, there are five main elements or dimensions that must be considered in order to accomplish a successful digital transformation in libraries in general. These dimensions will be explained next in the provided road map.

## 2. Research objectives

The purpose of this study is to provide answers to the following questions;

- What are the best practices for digital transformation implementation in libraries ?
- How can libraries employ emerging technology to increase user engagement and experience?
- How can libraries ensure that their digital transformation activities are inclusive and accessible to all users?
- What is librarians' role in fostering digital transformation in libraries?
- What metrics may libraries use to assess the success of their digital transformation efforts?

## 3. A concise vision for a digital transformation in libraries

The road map for a digital transformation assists in defining and managing the initiative. Its purpose is to provide a successful transformation, it gives structure to the transition from one tool to the next, incorporating everything from technology, tools, people, and processes. The suggested road map for a digital transformation in libraries encompasses the following five elements.

### 3.1 Vision and Strategy

The development of a well-defined vision is one of the most important aspects of effective digital transformation in libraries. Setting defined goals and objectives, identifying important stakeholders, and estimating the resources needed to complete the transformation are all part of this process. The library must have a clear vision of what it wants to accomplish and how it intends to get there.

### 3.2 Culture and Leadership

It is critical for the success of digital transformation to have a culture that encourages innovation and change. The library must build a leadership structure that supports the digital transformation and strategy. The leaders must

model the behavior that they expect from their team and adopt a digital-first mindset .

### 3.3 Technology and Infrastructure

The digital transformation of libraries depends on infrastructure and technology. To support its digital ambitions, the library must make sure that the required technology infrastructure is in place to assist in the library's digital transition. This may necessitate making investments in new software programs, hardware improvements, and cloud-based systems.

### 3.4 Partnerships and Collaboration

Successful digital transformation in libraries also requires partnerships and collaboration. The library must collaborate with external partners to leverage their knowledge and expertise to drive digital transformation. It must also foster collaboration within the library itself by encouraging cross-functional teams to work together to achieve the library's goals.

### 3.5 User Experience and Service Design

User experience and design are crucial components of a successful digital transformation in libraries. The library must provide digital interfaces that are simple to use and available to everyone in the community. Also, it must think about the requirements and preferences of the user while designing its online services to make sure that the process is enjoyable and clear.

## 4. Challenges of digital transformation

Throughout the transformation process, libraries may face a variety of barriers and issues. Interoperability, intellectual property rights, community participation, and sustainability are some of the challenges that libraries may confront during their targeted digital transformation. Acceptability, correctness, accountability, authenticity, and readability are some of the additional issues and obstacles associated with digital transformation (Murtaza Ashiq, 2022).

### 4.1 Interoperability issues

With interoperability, library content becomes more accessible and usable for users resulting in improved services. It allows libraries to integrate their services with other systems and platforms such as discovery services, digital repositories, and learning management systems. Moreover, interoperability can assist libraries in improving their services by making library content more accessible and usable to users. Interoperability empowers libraries to harness the benefits of

collaboration thereby improving efficiency and increasing productivity. Marek Deja (2021)

## 4.2 Community participation

Community engagement is an important element of digital transformation in libraries since it allows libraries to better understand their users' and communities' needs. It can also assist libraries in identifying new service and program possibilities that fit the requirements of their communities. Participation in the community can take several forms, including focus groups, surveys, and social media interaction. Libraries may strengthen their relationships with their users and offer more meaningful experiences by connecting with their communities

## 4.3 Intellectual property rights

Intellectual property rights can have a substantial influence on library digital transformation. Libraries must be familiar with quite a lot of types of intellectual property rights, including copyright, patents, and trademarks. In addition, libraries must understand how intellectual property rules relate to digital content and services. Libraries, for example, must guarantee that they have the appropriate licenses and permissions to enable access to digital materials.

### Conclusion:

The digital transformation has challenged the old concept of libraries; they are modernizing and re-evaluating existing services on a regular basis, as well as providing new ones. Libraries have become more than simply locations to borrow books and study; they organize events, give training, and provide recreational and cultural activities. Libraries have been debating and exploring digital change for years, but the widespread epidemic has accelerated the process.

To sum up, digital transformation in libraries is essential for libraries to remain relevant in the digital age. The five key elements of successful digital transformation in libraries include vision and strategy, culture and leadership, technology and infrastructure, partnerships and collaboration, and user experience. By focusing on these key elements, libraries will be well-positioned to achieve successful digital transformation and continue to serve their communities effectively.

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