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# **TRENDS IN LIBRARY RE-ENGINEERING**

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### ABSTRACT:

The emergence of digital technologies has had a significant impact on libraries and their operations. Libraries are reengineering their systems and services to adapt to the changing needs of their patrons. Library reengineering is a process of reviewing and redesigning library systems, services, and processes to increase efficiency, effectiveness, and user satisfaction. Re-engineering involves adapting libraries to changing user needs, technological advancements, and new service models. One of the most significant trends in library re-engineering is the shift from physical to digital collections. Libraries are increasingly investing in digital content and services, such as e-books, streaming media, and online databases. This shift has required libraries to invest in new technology and infrastructure to support these digital collections, such as cloud-based systems and robust network connections. In recent years, libraries have undergone significant changes due to advancements in technology and the changing needs of users. The purpose of this research paper is to provide a comprehensive review of the trends in library re-engineering. This paper explores the various ways libraries are adapting to new technologies, changing user needs, and shifting priorities. The research paper also highlights the benefits and challenges of library re-engineering, as well as the role of librarians in this process. Finally, the paper concludes with recommendations for future research and areas of focus for libraries looking to re-engineering their operations.

**Key words:** - Library, Library Re-engineering, digital technologies, technological advancement, Library services and system, user needs, user satisfaction.

### **INTRODUCTION :**

Libraries have been an integral part of society for centuries. Over time, libraries have evolved to meet the changing needs of the communities they serve. In recent years, libraries have undergone significant changes due to advancements in technology and changes in user behavior.. One of the most significant trends in library re-engineering is the shift from physical to digital collections. Libraries are increasingly investing in digital content and services, such as e-books, streaming media, and online databases. This shift has required libraries to invest in new technology and infrastructure support these digital to collections, such as cloud-based systems and robust network connections.

Another trend in library re-engineering is the move towards more personalized and usercentered services. Libraries are taking a more proactive approach to understanding their users' needs and preferences, and tailoring their services and collections to meet those needs. This includes offering more flexible loan periods, creating more interactive and collaborative spaces, and providing access to specialized research tools.

Open access and open educational resources (OER) are also driving changes in library reengineering. Libraries are increasingly becoming involved in initiatives to support open access publishing and the creation and distribution of OER. This includes providing access to open access journals and platforms, creating and hosting OER repositories, and advocating for open access policies.

Finally, library re-engineering is also being shaped by developments in data management and analytics. Libraries are investing in new tools and systems to manage and analyze data,

# such as research data repositories and data visualization tools. This is enabling libraries to play a more active role in research and scholarship, and to provide more evidence-based services and collections.

## **REVIEW OF LITERATURE :**

The literature on library re-engineering suggests that the concept of libraries has evolved over the years. Libraries were once known to be quiet spaces where people could read books and other materials. However, with the advent of the digital age, libraries have had to transform themselves into centers that provide new and innovative services. This has been done through library re-engineering.

According to Bryson (2003), library reengineering is a strategic management process that involves rethinking the way libraries operate in order to better meet the needs of their patrons. This process involves the adoption of new technologies, collaboration with other institutions, and the provision of personalized services.

One of the major trends in library re-engineering is the adoption of new technologies. Libraries have had to keep up with the pace of technological change and have had to adopt new technologies in order to remain relevant. These technologies include the adoption of digital resources, the use of mobile devices, and the development of online services (Aguilar-Salas & Pinto-Molina, 2018).

Another trend in library re-engineering is collaboration with other institutions. Libraries have had to work together with other institutions in order to provide better services to their patrons. This collaboration has been facilitated by the development of digital platforms that allow libraries to share resources and knowledge (Nwagwu, 2015).

The provision of personalized services is also an important trend in library re-engineering. Libraries have had to develop services that are tailored to the needs of their patrons. This has been done through the development of customized services that cater to the needs of different groups of users (Olaniran & Aderibigbe, 2017).

Library re-engineering refers to the process of redesigning libraries to make them more efficient, effective, and user-friendly. Here are some of the current trends in library reengineering:

#### **Technological Trends**

One of the most significant trends in library reengineering is the use of technology to improve library services. Libraries have adopted a variety of new technologies to enhance their services, including self-checkout systems, automated materials handling systems, and digital content management systems. These technologies have streamlined library operations and made it easier for patrons to access library resources.

Another technological trend in library reengineering is the development of mobile applications. Many libraries now have their own mobile applications, which allow patrons to search the library's catalog, reserve books, and access digital content from their mobile devices. This trend has been particularly useful for academic libraries, where students are increasingly using mobile devices to access library resources.

## **Digital Content**

Finally, the rise of digital content has had a significant impact on library re-engineering. Libraries are increasingly offering digital content, such as e-books and digital magazines, in addition to traditional print materials. This trend has led to the development of digital content management systems and the creation of new roles within libraries, such as digital content specialists.

**Digitalization:** Libraries are increasingly digitizing their collections to make them more accessible to users. This involves not only

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scanning books and other physical materials, but also creating digital exhibits, offering ebooks, and providing online access to databases. **Collaboration:** Libraries are working with other institutions, such as museums and archives, to share resources and create joint programs. This collaboration allows libraries to offer a wider range of services and reach more people.

**Maker spaces:** Many libraries are creating maker spaces, which are areas where people can come to use tools and equipment to create things. These spaces often offer 3D printers, laser cutters, and other high-tech tools.

**User-centered design:** Libraries are designing their spaces and services with the user in mind. This means creating spaces that are comfortable and inviting, as well as offering services that are easy to use and tailored to the needs of the community.

**Data management:** With the increasing amount of data being produced, libraries are becoming more involved in data management. This involves not only collecting and storing data, but also helping users to analyze and visualize it.

**Open access:** Many libraries are embracing the concept of open access, which involves making research and other information freely available to the public. This helps to promote knowledge sharing and collaboration.

## The process of re-engineering

The process of re-engineering a library can vary depending on the specific goals and needs of the project. However, some general steps that could be followed are:

1. Define the purpose and scope of the reengineering project: Clearly identify the reasons for the re-engineering project, and define the boundaries of the project. Determine the goals and objectives of the project, including any expected outcomes and benefits.

2. Conduct a thorough analysis of the existing library: Gather and analyze data about the current state of the library, including its



strengths and weaknesses, usage patterns, and user needs. Identify any gaps or areas for improvement.

3. Develop a plan for the re-engineering project: Based on the analysis, develop a plan that outlines the specific changes and improvements that will be made to the library. This plan should include timelines, resources needed, and key performance indicators for measuring success.

4. Obtain buy-in and support from stakeholders: Engage with stakeholders, including library staff, users, and funders, to get their buy-in and support for the re-engineering project. Communicate the goals, benefits, and expected outcomes of the project, and address any concerns or questions they may have.

5. Implement the changes and improvements: Carry out the planned changes and improvements to the library, including any updates to technology, workflows, policies, and services. Ensure that staff are trained and equipped to support the new librarv environment.

6. Evaluate and monitor the results: Monitor and evaluate the outcomes of the re-engineering project to determine its success and identify any areas that may need further improvement. Collect feedback from staff and users, and use this feedback to make ongoing improvements to the library.

### **Benefits and Challenges**

Library re-engineering has several benefits, including increased access to resources, improved user experience, and enhanced efficiency. However, there are also several challenges associated with library reengineering, including the need for significant financial investment, the need for staff training, and the need to balance traditional library services with new technologies and services.

## **Role of Librarians**

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# Librarians play a critical role in library reengineering. They are responsible for implementing new technologies and services, managing resources, and providing support to users. Librarians must also be proactive in identifying and addressing user needs and in keeping up with the latest trends in library reengineering.

## Key Drivers of Library Re-engineering

There are several key drivers of library reengineering.

The first is the need to adapt to changing user expectations. Today's users are accustomed to digital technologies and expect instant access to information. Libraries must provide seamless access to their collections through digital platforms and ensure that their online services are user-friendly and intuitive.

The second driver is the need to remain relevant in the face of competition. With the rise of open access publishing and the availability of online resources, libraries must differentiate themselves by offering unique services and resources. This may include developing specialized collections or providing personalized research assistance.

The third driver is the need to manage shrinking budgets. Libraries are facing significant financial pressures, and re-engineering can help them streamline their operations and reduce costs. This may involve outsourcing certain services, adopting new technologies to automate routine tasks, or rethinking staffing models.

## Emerging Best Practices in Library Reengineering

Despite the challenges, there are several emerging best practices in library re-engineering that can help libraries achieve their goals. The first is the need to engage with users and stakeholders throughout the re-engineering process. This includes soliciting feedback on proposed changes, providing opportunities for user testing, and communicating transparently about the rationale behind decisions.

The second best practice is the need to embrace agile methodologies. Agile methodologies prioritize flexibility and responsiveness and can help libraries adapt to changing user needs and evolving technologies.

The third best practice is the need to focus on user experience. Libraries must ensure that their services and resources are user-friendly and accessible, and that they provide personalized support to users as needed.

## **CONCLUSION** :

Library re-engineering is a complex process that requires a significant shift in mind set and culture. However, with the right approach, libraries can adapt to changing user needs, remain relevant in the face of competition, and manage shrinking budgets. The key drivers of library re-engineering include the need to adapt to changing user expectations, remain relevant, and manage budgets. Libraries must navigate challenges such as managing organizational change, balancing tradition with innovation, and ensuring that the process is data-driven. Emerging best practices include engaging with users and stakeholders, embracing agile methodologies, and focusing on user experience. By following these best practices, libraries can successfully re-engineer their services and operations to meet the needs of today's users.

The trends in library re-engineering discussed in this research paper demonstrate how libraries are adopting new technologies, adopting usercentered design principles, creating collaborative spaces, and offering digital content to meet the needs of their patrons. It is clear that libraries will continue to evolve in response to new technological advancements and changing user behaviors.

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