JETIR.ORG

ISSN: 2349-5162 | ESTD Year: 2014 | Monthly Issue



JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

Challenges for a Librarian in the age of Artificial **Intelligence (AI)**

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Abstract: The current paper postulates the positive and negative effects of AI in the field of Library Science, especially the role of Librarians in the age of AI. For example, how librarians, especially those in educational institutions, will be affected by this technological advancement in content generation, search, or modification with the help of tools such as Chat GPT, Meta, Google among others.

Introduction

In the current scenario, when the demand of access to information is getting exponentially increased with each passing day, libraries are the prime source in providing this ease of access to a desired information. As a result of the rapid advancement in cyber world as well as development of new and innovative applications, there has been a paradigm shift in the format and dynamics of information. To fill up the void in terms of facilitating and storing the information to make it available to a user as and when required, libraries and their custodians are playing a crucial role. Albeit they have at their disposal AI as a magic wand, which assists them in this gargantuan task.

In recent times, Artificial intelligence is in hot discussions, especially since the beginning of 2023, when the public first witnessed the power of ChatGPT, and other AI tools. However, the development of this technology influences different careers; some are at risk of disappearing and others could well change radically. The question is in what manner librarians, especially those in educational institutions, will be affected by this technological advancement. Certain experts believe that AI will make students lazy and will diminish the value of the research for a Librarian. Others, on the contrary, believe that now that the AI has arrived, it is too late to turn back. Much would depend on the transparency of researchers if they use AI for writing or research.

Ironically, in the past, frequently, it has been predicted that the profession of librarian was about to disappear with the advent of Internet, multimedia, e-books, interactive encyclopaedias, or Wikipedia. But Librarians are still here, albeit now more in demand. Their role has changed in part as they have had to learn new skills. As a result, they are still in demand by students and teachers alike. Similarly, Artificial intelligence seems only the next chapter to be added in their profession.

Hypothesis

Keeping in consideration, the advancement of Artificial Intelligence (AI) and its integration in Library architecture, it is hypothesised that the role of a Librarian becomes even more challenging and multifaceted, which, in the long run, would systematise and synchronise the entire library services for the benefit of a user.

Role of a Librarian in 21st Century

Before going deep into the subject, one should must understand the multifaceted role of a librarian in the 21st century where technological advancements are happening on the daily basis. Librarians at present have diverse roles and responsibilities. They are involved in instruction and instructional design, reference services, embedded librarianship, outreach, collaboration, and collection development. At the same time, they also need to stay updated with new trends in higher education and analyse their impact on the educational landscape. They play a crucial role in promoting government initiatives in higher education and utilizing information communication technology for teaching, research, and extension activities. Librarians are essential in the current information society, as they help navigate the increasing amount of information available, ensure quality control, and educate users about predatory publishing. Collaborative efforts between authors, library professionals, and government agencies are necessary to prevent predatory publications.¹

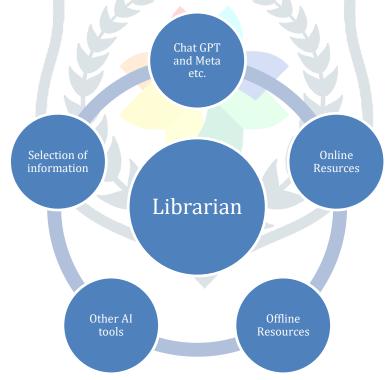


Figure 1: Role of a Librarian in processing the information²

In the above relational model (Fig. 1), it is lucidly depicted that how librarian plays a crucial role in processing the information to be used by a library user. A mere integration of AI in this process makes the entire exercise more attractive and less time consuming for the benefit of a user.

¹ Omeiza, Momoh, Emmanuel, Lanre, Folorunso, Abubakar, "The evolving roles of libraries and librarians in the 21st century", Typeset.io, January 01, 2019.

² Illustration mine.

For librarians, the advancement in technology can at the same time make their lives even easier and can create unforeseen challenges in their domain. It must be noted that AI is already increasingly helping in quick indexing the quantity of documents available in the establishment. User services could of course be improved with this technology. For example, a person who does not know the title of a book or an author would consult conversational robots to more easily find the work they are looking for. A similar approach on the side of researchers who would quickly find studies by contemporary colleagues or from other eras.

Integration of AI with Library and Information sciences

Here AI could also help librarians promote different books on a topic. For example, they could target various writings on different topics with the help of AI. They could even create small synopses for each book to entice readers and get them to borrow them. There are also different ways to use image generators to design images to better identify sections or simply personalize the library.

Noticeably, the arrival of algorithms in libraries is only in its early stages. Few use them. However, while professionals do not all agree on their place, some have understood that it is better to jump on the bandwagon and take advantage of the possibilities. Therefore, Librarians should be prepared to answer relevant questions from faculty and students, but they may also consider proactively promoting their AI expertise. They should develop their understanding of basic engineering and problem formulation to engage most effectively with the academic community.

Recommendations for improvement

One should must admit that the rapid advancement in the field of artificial intelligence is proving to be a boon for the librarian making their role more attractive at the same time challenging by reshaping the professional landscape. If libraries are to adapt in the new fast changing technological scenario, they must innovate their services and re-examine their practices, which can be achieved through the process of integration of AI in libraries and librarians should consistently hone their skills in this regard.

The integration of ChatGPT, Meta AI in libraries is showing remarkable results among the users, who receive an impeccable quality of service in the form of real-time assistance, AI guided research information among others. However, there is a greater need of more such integration of AI in library services and more specific researches are the need of the hour for an even more synchronised and systematic Library architecture, where Librarians have gargantuan roles to play for our more tech-savvy future generations. Simultaneously, authorities also need to have more pragmatic approaches towards these integrations and should welcome the changes with open arms and with more generous funding to empower our libraries, the real knowledge-centers, which transmits generational knowledge from generation to generation and beyond.

About the Author: Bhavna Saxena is an academician, thinker, author, and a bibliophile, who is currently working as a Librarian at Apeejay International School. She possesses a Master Degree in Library & Information Sciences and has around 10 years of experience of working in libraries in India and abroad. She has authored several articles on related topics in various national and international journals.

She staunchly believes that even the minute details and smallest incidents in life have a lot to tell, if viewed from a larger prism and broader vision. In fact, she often repeats that the nature is the purest and most empirical form of a library, where one can find any topics to learn and imbibe and each one of us are born librarian/ custodian of this omnipresent library.

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