

AI in Libraries: Trends and Future Perspective among Library Professionals in Kamrup, Assam

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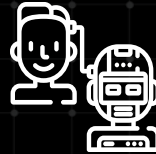
ARTIFICIAL INTELLIGENCE IN LIBRARIES

Project



An exploratory
assessment of AI
enabled trend and
perspective within
Libraries

Target



LIS Professionals held
within the region of
Kamrup, Assam

Services



Library technology,
Machines, Chat bots, OCR
technology, Intelligent
libraries.

01

Introduction



Introduction



Artificial Intelligence fosters significant development that is drastically altering the services libraries offer and the way they operate. In a digital era, libraries are keeping up with swift advancement of technology. An innovation that has the potential to totally change library operations. But AI's applicability and utilization around the globe are still in their infancy.


This study attempts to investigate trends and perspectives of library professionals from Kamrup, Assam, an area in Northeast India, in light of the recent technological advancements in the field of libraries.

02


Objectives of the Study




Objectives




To determine the **socio-demographic** characteristics of Assam library professionals.




To assess the **views of library experts** on the use of AI and its long-term viability.



To examine present **patterns** and **possible applications of AI** services and tools in libraries.



To assess how Assam library professionals see the effects of AI technology on the **resources** and **services offered by libraries**.



To share their **thoughts** and **viewpoints** on use of artificial intelligence.

03

Literature REview



Literature Review

The study of artificial intelligence in libraries is not a new one. [Harisanty et al., \(2023\)](#). conducted a systematic review on Google Scholar that clarifies the significance of the phrases “artificial intelligence,” “smart libraries,” and “library” by showcasing a variety of conceptual papers, empirical research studies, and literature reviews.

According to [Arlitsch and Newell, \(2017\)](#) advancements in machine learning techniques, the proliferation of large data, and the increasing capacities of computer processes have all contributed to the advancement of artificial intelligence. This trend has begun to change several industries, including libraries.

But integrating AI into libraries comes with a lot of challenges that need to be carefully considered ([Harisanty et al. 2023](#)).

04

Research Methodology



Research Methodology



Research Design

A quantitative research design that included questionnaires and statistical analyses based on a 5-point Likert scale.



Sample Selection

A stratified random approach was utilized in the study to choose a broad group of participants from academic, special, public, technical, management, and other research organizations libraries and information centres.



Sample Size

36 actively engaged library professionals, ranging in grade from head librarian to library trainee, made up the sample.



Survey Tool

A Google Form was used to deploy the survey tool. Agreement was created digitally by requesting the targeted professionals connected to the library/resource domain using social media sites including Facebook, LinkedIn, and WhatsApp Community.

05

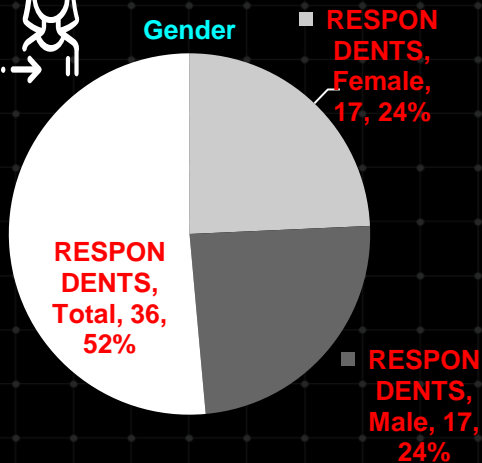
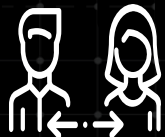
Data Analysis



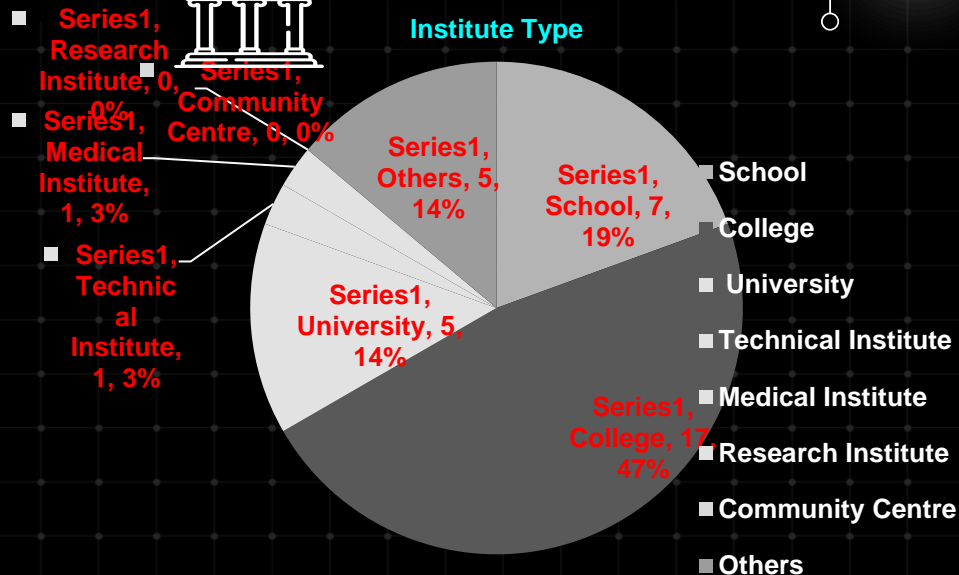
SECTION

1

Demographic Details



The study covered 50% of female participants and 50% of male participants

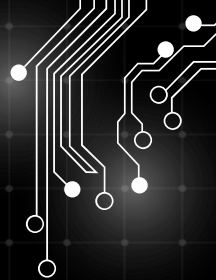


Universities (14%) and colleges (47%) were the two most prevalent types of institutions

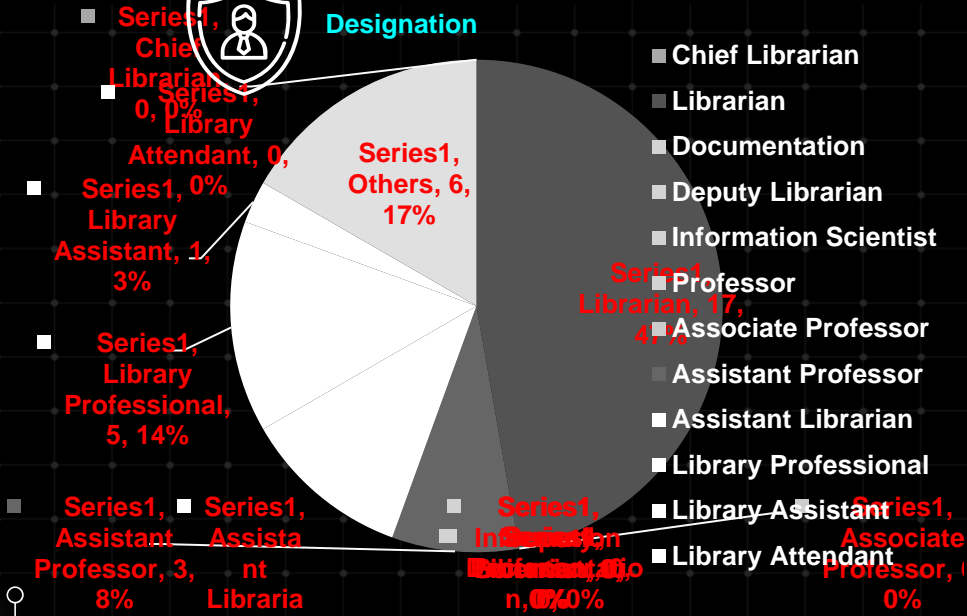
SECTION 1

1

Demographic Details



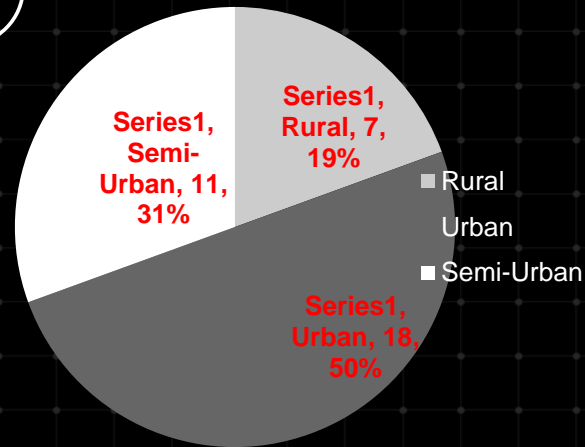
Designation



The majority held roles as college librarians, (47%).



Residential Area



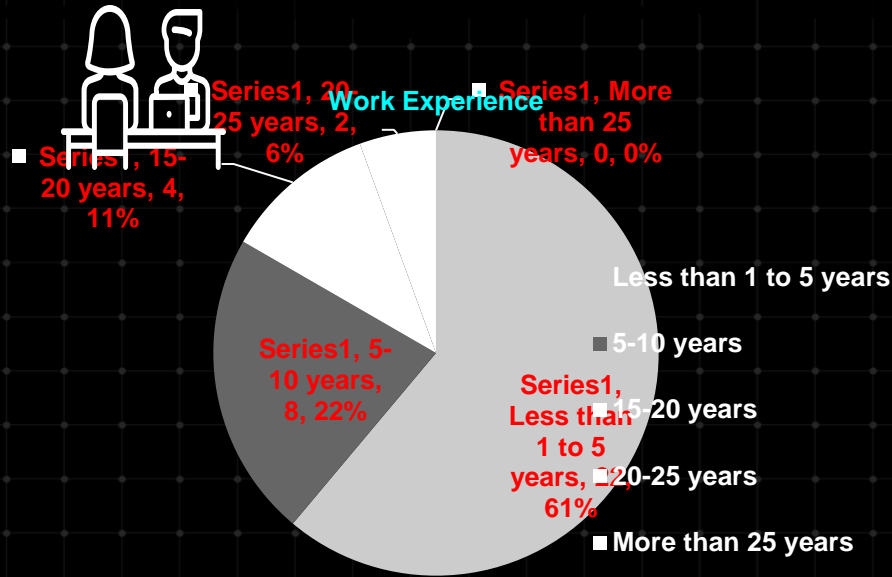
(50%) of the population occupied their workstations in Urban areas .



SECTION

1

Demographic Details



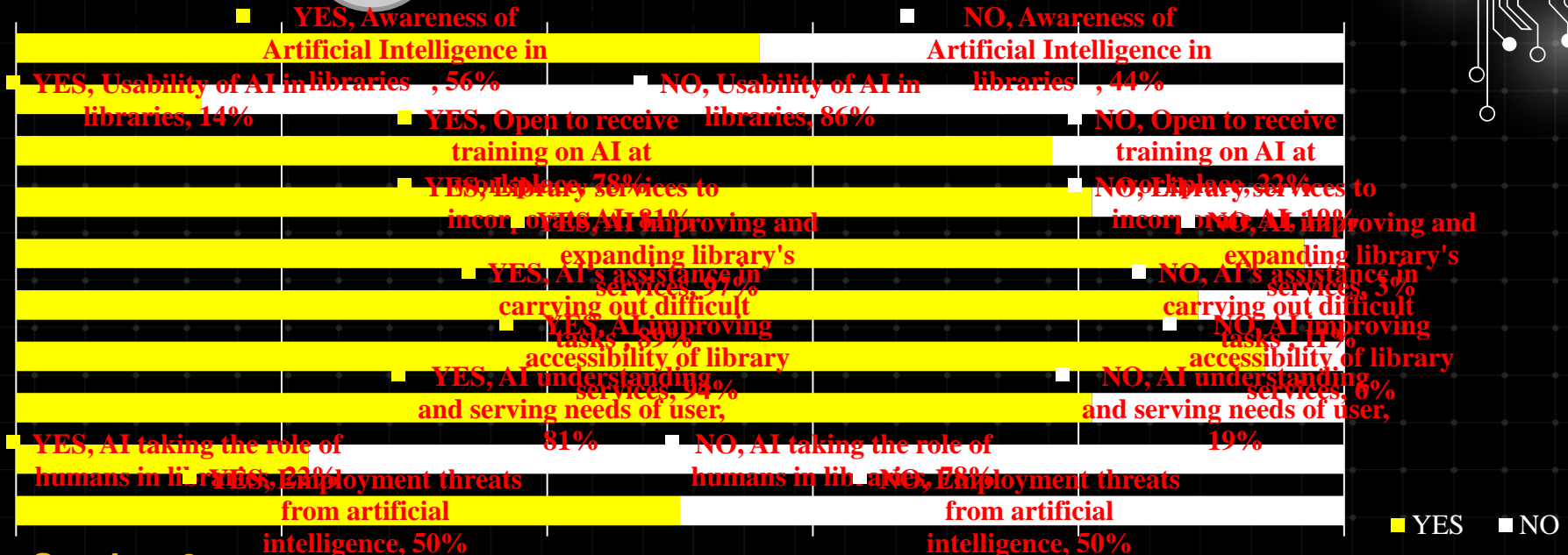
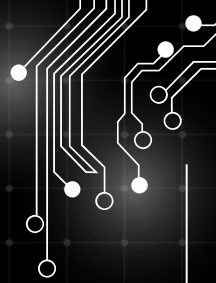
With regard to experience, (61%) of the group had less than 1-5 years under their belt, while (22%) had 20-25 years of experience.

These results point to a diverse group of participants with a range of experiences and degrees of library-related competence.

SECTION

2

Basic Understanding of AI



Section-2 shows that, although just (14%) of library professionals see AI used in libraries, (56%) of library professionals are aware of its existence and (97%) supports AI's hand in service expansion. The majority support their readiness to be trained in its usage (78%), the incorporation of AI into library services.

Data shows AI technologies is being used in library operations in limited context, and believed that it could not replace human intelligence despite AI integration if it prevails in future.



SECTION

3

Self-assessment of technological skills in AI



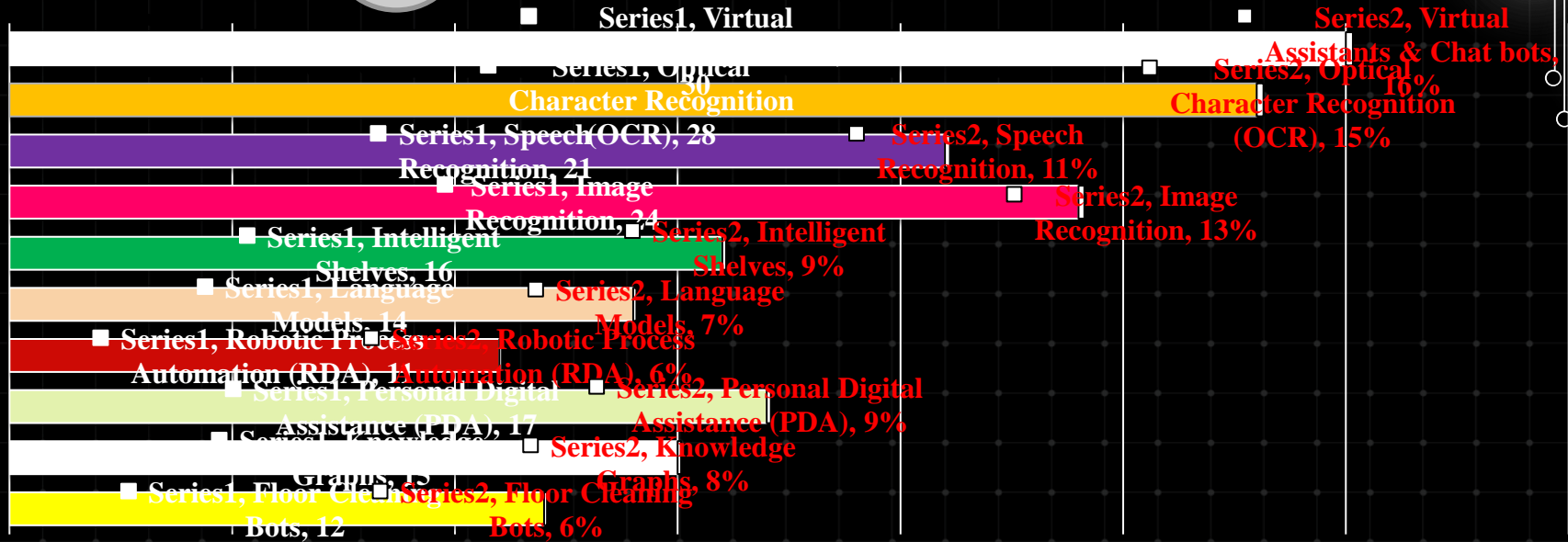
Section-3 offers a skill-based study of the impact of AI deployment in Kamrup, Assam libraries using a Likert scale. Analysis ranges from **Very Poor (1)** to **Excellent (5)**.

According to respondents, AI will boost decision-making, user experience, search capabilities, and accessibility to improve access and discovery and boost productivity. In order to successfully integrate AI, there are some restrictions and worries about the usability of visual data interpretation, communication, problem solving, and research skills.

SECTION

4

Current AI Applications



Section-4 provides a summary of AI services and technologies that are currently being used.

Responders cast their votes for Virtual help and Chat bots that had the highest poll percentage of (16%), followed by OCR (15%), image recognition (13%), and speech recognition (11%).

Other technologies like language models, RPA, PDA, graphs, intelligent shelves, and so on were not as well-implemented by the respondents in their libraries.

SECTION

5

Future Perspective on AI in Libraries

■ To a Great Extent
 ■ Somewhat
 ■ Little
 ■ Very Little
 ■ Not at All



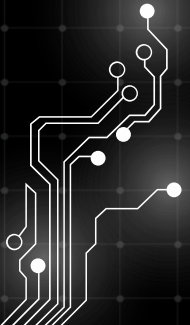
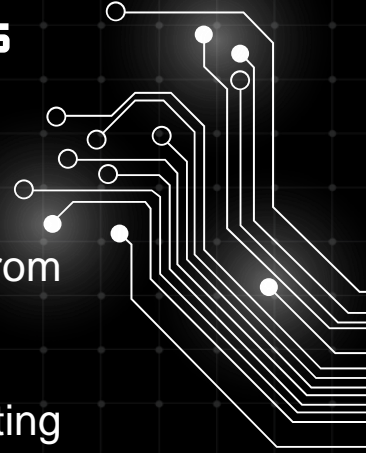
SECTION

5

Future Perspective on AI in Libraries

Section-5 outlines perspective on AI's support for libraries rated from 'To a Great Extent' (1) to 'Not at All' (5) in a 5 point Likert scale.

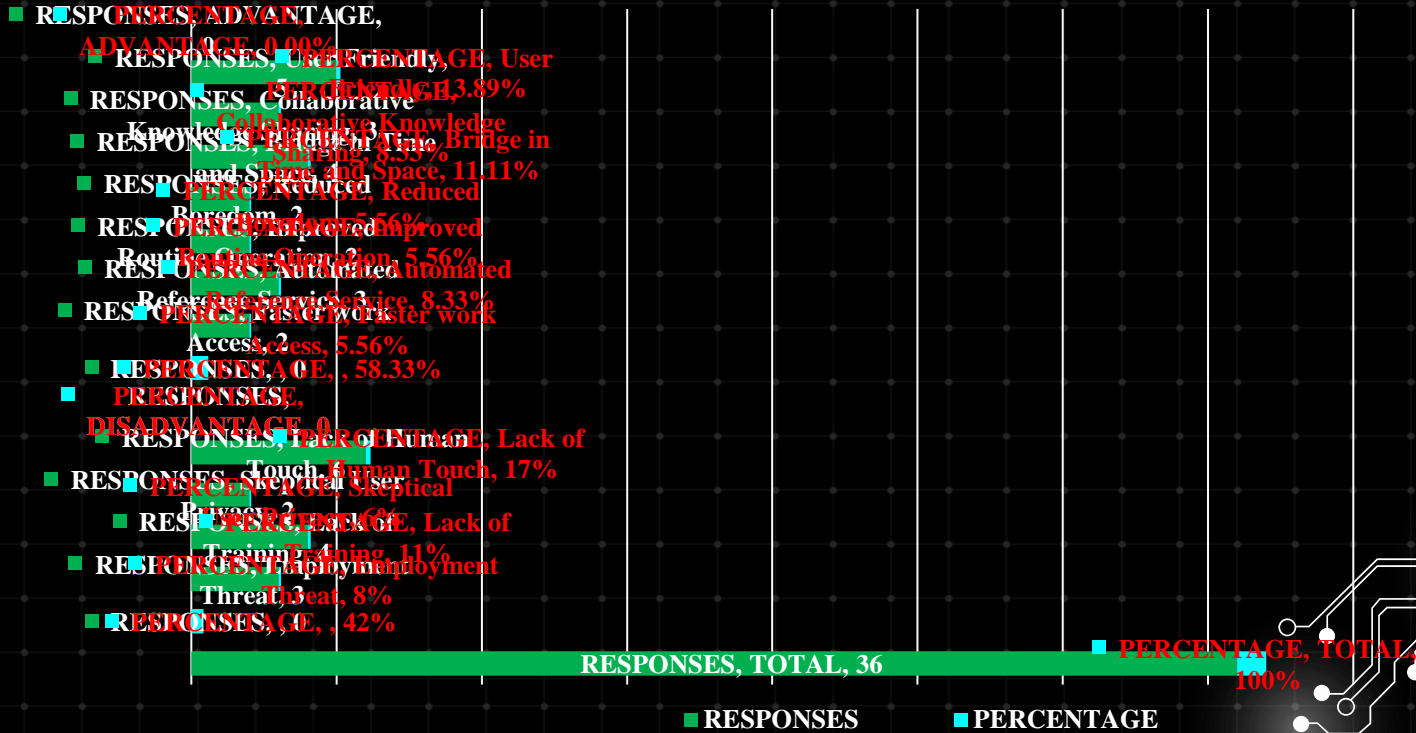
The data summarizes how library professionals see AI supporting library services in the future. Respondents thought that, if AI were to be implemented gradually in the context of library services, a number of crucial issues would need to be taken into account when examining the sustainability of AI in the future. In order to accomplish educational objectives in the setting of Indian libraries, respondents felt that AI will significantly improve a variety of library functions, including decision assistance, user engagement, and its connection with NEP 2020. However, a small significant danger to employment was predicted.



SECTION

6

Open Opinions on AI



SECTION

6

Open Opinions on AI

Section-6 outlines some of the benefits and drawbacks as reported by library professionals. Positively, according to (13.89%) of respondents, AI devices in libraries would improve user experiences, expedite workflows, and help users. (11.11%) of the respondents made comments on the 24/7 availability of services at the appropriate moment and the ease of storing that robotic storage would provide. (8.33%) perceive AI facilitating automated SDI and reference services, as well as fostering a sense of learning and knowledge. (5.56%) of participants said AI will make the library less boring since it would seem to be a very helpful atmosphere. Furthermore, as reported, AI would perform regular tasks like classification and cataloging quicker.

However, highlighting the drawbacks, (17%) of the respondents expressed their concern about the "human touch," saying that while they welcome AI, it would lack and sustain significant consequences since robots cannot replace people. Despite the fact that AI would significantly improve library settings, (11%) of respondents pointed out there was a lack of training and other support services to make AI easier to use. (8%) are examining the possibility of replacing human employment, igniting a threat over whether AI could soon displace people in their work or create new possibilities. (6%) percent of the respondents raised views about user privacy, citing ability of machines to decode personal data that may be misused for illicit purposes.



06

Conclusion



Based on the survey's findings, it is clear that while Kamrup, Assam library professionals are aware of AI technology, they may not be fully aware of how libraries may employ them. Majority of library professionals are employed by colleges, universities, and other public and private institutions.

Despite a small sample size, finding shows that the professionals are mature enough to comprehend and use some emerging technology, such as AI. Results show that while these technologies are not widely used in the area, despite professionals are willing to learn about their application to enhance the effectiveness, accessibility, and openness to library services. Additionally, many responders agree that AI cannot take the position of human intellect in libraries.

The survey demonstrates how AI may improve decision-making, user experience, search capabilities, and accessibility to libraries. Regarding the financial ramifications, resource needs, and resource preservation connected with AI adoption, there are conflicting views and worries. Nonetheless, an open-ended question at the end delved deeply into respondents' detailed perspectives and yielded insightful data on the topic. This comprehensive and illustrative data can be used as a starting point for future investigations in the area.

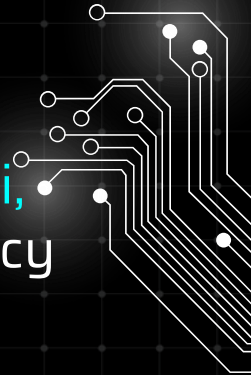
Conclusion



References

Arlitsch, K., & Newell, B. (2017). Thriving in the age of accelerations: A brief look at the societal effects of artificial intelligence and the opportunities for libraries. *Journal of Library Administration*, 57(7), 789–798. doi: 10.1080/01930826.2017.136291

Harisanty, D., Anna, N. E. V., Putri, T. E., Firdaus, A. A., & Noor Azizi, N. A. (2023). Is adopting artificial intelligence in libraries urgency or a buzzword? A systematic literature review. *Journal of Information Science*, 01655515221141034. doi: 10.1177/01655515221141034.





Thanks!

Do you have any questions?

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