



The role of librarians in the artificial intelligence (AI) revolution is undergoing significant transformation

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Abstract

This study aims to explore the emerging role of librarians in this AI-driven era, highlighting how they play a role in fostering an informed, ethically aware, and technologically proficient society. The future of librarianship will depend on their ability to embrace these innovations, while maintaining their core mission of supporting lifelong learning and equitable access to information. AI has revolutionized librarianship, yet it is the same information managed. Reference, cataloging, and management now target digital resources. It shall be ethical to make use of AI in facilitating the use of library information. The facility enhances reference services by applying natural language processing, machine learning, and virtual assistants. This will help the librarians interpret the AI output and effectively conduct an information search that satisfies patrons' requests. AI Tagging clearly raised the quality of the metadata as it automatically organized the content. With the AI-related tasks of Information Verification and Classification, the records librarian was thrown into a sea of changing virtual realities. Artificial Intelligence also brings updates in the training of new technologies for librarians, ensuring data safety in order to bridge the digital gap. Ethics would try to bring a balance to the librarian in deciding upon AI and its use, with problems it's capable of bringing forth, algorithmic bias included, and how it will touch traditional services. Newer topics have displayed serious impacts on many aspects while librarians have prepared themselves to enter the role of managing information resources. AI will alter information storage, retrieval, and dissemination, hence justifying the change in librarians.

Keywords: Artificial intelligence (AI), library management, information technology, library & information science, transforming libraries

Introduction

In the past, information was shared with the aid of collections and reference services in libraries. Nowadays, AI is changing that. Today, automation and AI is applied in the search by librarians. They are bound to continuous learning since the classical skills keep changing. In addition, the reference services are assisted by chatbots that come up with effective suggestions. The future of humans in libraries, along with the role of professionals concerning automation, is really not certain. During the AI revolution, the role of librarians would be that of "information architects" and system designers; automation of basic tasks frees them from cataloging and outreach. AI engines enhance the information retrieval done by librarians. Chatbots deal with the simple queries. Data Management: AI will use the data according to regulations. Ethical Decision: Algorithmic bias, privacy are the factors the librarians need to be cautious about. The Reference librarians help their clients in finding the required materials and help in accessing the resources. AI virtual assistants are changing the work of reference librarians. AI is improving information retrieval, thus helping librarians trace materials. In addition, NLP avails avenues that help users access quality resources. Only the complex questions need to be referred for humans while simple library queries remain with the AI chatbots. This saves the time taken by the librarians to analyze data from literature reviews and thus gives them ample time to do research. They also guide the users on good practices in the use of information found online. During cataloging, AI efficiently undertakes metadata, keywords, and classification codes, providing constant accuracy and saving time. AI enriches the digital resources through metadata in machine learning. It categorizes materials and organizes

digital collections using AI, AI-driven OCR, and Text Mining with a view to facilitate the process of locating and tagging texts. The cataloguer is therefore initially responsible for quality and organization with shifting priorities. Libraries turn into virtual centers, and the management activities of librarians by AI head the lead. AI-augmented library management is for both clients and employees. A librarian needs to be aware of the facets of how new technologies take care of existing tasks instead of creating new ones. The Management needs to create fertile ground for staff to learn about AI and Ethics. This strategic plan came with improvements in service delivery, resource management, and development of policies to govern the use of AI. It is here that librarians have to align such technologies with users' goals and needs.

Materials and methods

In this research paper, a detailed review of the information sources is carried out and after its examination, the content is described in detail and this detailed step-by-step explained. The role of the librarian in this revolution with AI will be radically changed. AI influences all the aspects of library work, starting from data to information, and it even alters the way the professional interacts with the community. Herein is a bird's view of such roles in transition:

1. The Role of Librarian in the AI Revolution:

- a. Their role has evolved from simply organizing information and making resources available to library patrons to a much more dynamic one with the use of evolving AI technologies. Key changes include:

- b. Such tools go on to support librarians with curating the content to consider user preference and search patterns, which make resources more discoverable.
- c. Automation of routine tasks: Activities such as checkout, return, and reminders have been automated to free the librarians for more complex services such as information literacy training.
- d. AI can allow libraries to create truly personalized experiences through recommendations and learning experiences that cater to specific needs and preferences.
- e. Information Resource Management: Today, librarians do more in the management and interpretation of large datasets to help users find their way through and analyze such data using AI tools.

1.1. The Librarian's Role: Traditional vs. AI-enhanced.

The face of the librarian, through AI, has slowly but surely started to make the keeper of books an active knowledge curator and technologist. Major changes that are underway in the field of librarianship by AI in reshaping information management:

1.1.1. Information retrieval

- a. **Traditional Role:** Librarians have been gatekeepers of information, guiding patrons to books and other forms of media.
- b. **AI-Enhanced Role:** The role of a librarian today is guiding the user through the mass of online data using AI-powered advanced search engines, recommendation algorithms, etc. Such tools as NLP and machine learning enhancement give a boost to searches with the aim of quicker access to relevant information by the patrons.
- c. **New Skills:** AI enhances metadata tagging, indexing, and categorization that librarians perform on materials to make them more accessible and searchable.

1.1.2. Data curation

- a. **Traditional role:** Physical collections management by librarians, catalogue-in proper format.
- b. **AI-Enhanced role:** While AI performs most of the cataloging, it is the work of a librarian to curate the collections, preserve them, and assure their quality, development with AI systems that are fed valid, representative, and ethical data.
- c. **New competencies:** Digital curation, ensuring data privacy, non-bias in AI algorithms that are engaged for information retrieval and preservation.

1.1.3. Personalized Learning and Information Services.

- a. **Traditional Role:** The librarian acts as a guide to the patron, recommending various books and other resources.
- b. **Artificial Intelligence Function:** Artificial intelligence technologies-like machine learning-can make recommendations tailored to each user's interests and/or past behavior. The Librarians work collaboratively with

the technology to help make the recommendations ethical and diverse, but not driven by the bottom line.

- c. **New Skills:** The librarian should understand the AI algorithms and influences so that the same helps on ethical grounds in delivering appropriate personalized recommendations to the people.

1.1.4. AI-assisted research and support

- a. **Traditional Role:** This encompasses librarians who are supposed to help the patrons in research resources, citation styles, and strategies.
- b. **Increasingly Important Role of AI:** This is a new job of the librarian-instructing users in how to apply AI resources such as ChatGPT effectively and ethically. They interpret AI output and apply it appropriately but not in an over dependent fashion.
- c. **New Skills:** Librarians should also learn about the research tools of artificial intelligence, including their functions and best practice in use for academic and professional research.

1.1.5. Ethics oversight and digital literacy

- a. **Traditional Role:** Librarians have long supported intellectual freedom, privacy, and equal access to information.
- b. **AI-enhanced Role:** As AI becomes integrated into everyday information access, librarians play a crucial role in safeguarding privacy, ensuring data security, and promoting digital literacy. They must be vigilant about the ethical implications of AI in information systems, including bias in AI algorithms, misinformation, and the spread of harmful content.
- c. **New Skills:** Awareness among librarians on AI Ethics, Data Privacy Laws, and use of emerging AI technologies for equity, accessibility, and privacy.

1.1.6. AI in archiving and preserving

- a. **Traditional Role:** Librarians and archivists conserve collections; assure the access to historical records.
- b. **AI-Enhanced Role:** These AI tools digitize, transcript, and preserve the documents more efficiently, leaving the librarian to deal with collection management, integrity, and enhancement of accessibility. For instance, AI can allow text recognition from a scanned document, the digitization of audio or visual archives, and can even predict which materials will degrade.
- c. They also need training with AI tools for digitization, and in safekeeping, protection, and accessibility of digitized materials for future generations.

1.1.7. AI-powered creation and analysis

- a. **Traditional Role:** These experts also assist the users in content development, such as writing and research.
- b. **AI Role:** AI platforms create summaries of the content and reports, hence creating content. The librarian instructs the patron in responsible use of AI to get the

desired academically acceptable output and takes them through how correctly to use citations to avoid plagiarism. But librarians need to understand AI content creation tools themselves to help patrons understand both their capabilities and limitations in the creation of credible, ethical work.

1.1.8. Better human-AI collaboration

- a. **Traditional Role:** The librarian supports providing information and other resources to the people.
- b. **AI Role:** Librarian mediates users and AI tools on how to best cooperate to reach both human insight and machine efficiency. They will teach AI literacy, algorithms, and how to use enhanced results to improve their work-not to replace it. It means that librarians should help to interpret for the user, in very clear terms, when AI can be trusted and when human judgment is required.

1.1.9. Libraries into tech hub

- a. **Traditional Role** Libraries were houses of quiet study and learning.
- b. **AI-Enhanced Role:** Libraries are gradually evolving into tech-focused points containing AI workshops, coding classes, and innovation rooms. It is also the duty and responsibility of the librarian to encourage digital skills and technological literacy to make them mainstream, especially in groups where access to facilities is still limited.
- c. **New Skills:** The required competencies should be further developed in emerging technologies: coding, data analysis, digital fabrication tools-areas beyond AI.

2. The reference librarian in the artificial intelligence revolution

- a. AI increasingly informs the job of the reference librarian in the way of trying to achieve effectiveness and timely information delivery to its clientele; these changes involve:
- b. AI-IR includes state-of-the-art search engines, bots, and assistants, which have been in the hands of librarians ever since to help users reach their answers even more speedily. It processes large amounts of data with unmatched accuracy compared to its predecessors.
- c. **Tr. Better Research Support:** AI applications do literature reviews, hence recognizing trends and methods that might be applied. Reference librarians use them to enhance research guidance for patrons.
- d. **Information Literacy and Ethics:** With AI being at the core in searching out information, it means that librarians will now be more involved with teaching users to critically evaluate the content made by AI. This would also include algorithmic biases, ethical implications, and source checking.
- e. **Virtual Reference Services:** AI-powered chatbots and virtual assistants allow reference librarians to provide services 24/7, guiding users in finding resources and

answering queries, thus making libraries function more effectively.

f. Reference Librarian: The Traditional and AI-Enhanced.

- g. The rise of Artificial Intelligence greatly changes the reference librarian's role, yet librarians will not become obsolete. AI enhances their expertise to be more targeted, efficient, and in tune with the users' needs. Here's how AI influences the work of a reference librarian:

2.1. Automating routine data retrieval

- a. **AI Search Engines:** Advanced AI search engines or chatbots using Open AI's GPT class perform routine queries, freeing up the patron's time to quickly get their answers and allow the reference librarians to address more complicated queries.
- b. **24/7 Support:** AI can enhance library systems by providing automated support at any time, so users can get help if librarians are not available, thus increasing access to the service.
- c. Knowledge Management and Data Discovery Improved
- d. **AI Discovery Tools:** The discovery of AI allows for an increase in the retrieval of information. This is made possible by improving the algorithms of in-depth searches and the organization of data. Reference librarians will use AI tools in recommendations, personal reading lists, and resources concerning patron preference.
- e. **NLP:** AI makes systems understand in simple language what the user says. The librarians could thus use to help the users navigate through complex academic databases, or even help users find sources when they don't have exact search terms.

2.2. Information curation and synthesis

- a. **AI as a Research Assistant:** The AI scans the large datasets, underlines the main concepts, and summarizes articles or books. Reference librarians make use of such facilities to understand substantial information to answer queries arising from patrons in academic or research environments.
- b. **Personalised recommendation:** AI therefore helps libraries make the user experience more personal. It analyses the user's browsing and borrowing history to recommend material. The reference librarians will therefore cooperate with the AI in refining such recommendations to suit the needs.

2.3. Providing information literacy and critical thinking

- a. **Information Literacy Instruction:** While AI is getting better and better at answering questions, the reference librarian's role is going to be more towards teaching the user to critically evaluate information. They will help users recognize biases in AI content, evaluate source credibility, and make informed choices.

- b. **Ethical Use of AI:** Reference librarians could also be on the front lines of teaching people about the possible ethical concerns with AI, including the sharing of personal data, misinformation, and biases in algorithms. In presenting insights through AI-driven resources, they will guide users through the tightrope between convenience and reliability.

2.4. Specialization in data science & AI tools

- a. **Application of AI in Library Systems:** Some librarians might learn about data science and machine learning in order to further advance AI in libraries with regards to cataloging and digitization, among others.

- b. **Data Curation:** Reference librarians may be supportive in reacting to the needs of researchers and library users by managing their data sets, such as metadata tagging and data governance practices amidst the big data era.

2.5. Promoting ethics in ai use in research

AI in Research: Reference librarians support researchers with the effective use and application of AI tools in research and thereby access datasets and analytics driven by AI. They establish the best practices in ethics that will make sure AI is used responsibly without reinforcing bias or other forms of inequity.

2.6. Curating

- a. **AI Content** Because AI-powered tools generate everything from text and images through to data, it means reference librarians can now be used to curate and vet such information. They will have to evaluate AI-generated content for its accuracy and relevance and then integrate it appropriately into the collection.

- b. **Collaboration of AI Developers:** "Some libraries engage reference librarians in collaboration with AI developers so as to develop user-centered and context-sensitive AI applications which address the context of a library user".

2.7. Highlight community involvement and activism

- a. **Human Touch in a Digital Era:** This could mean that librarians, once AI continues to evolve, can focus more on community outreach and customizing help that AI is not able to give. They may facilitate equity in access to the technologies of AI and literacy in their use.

- b. **Human Touch:** While AI automates tasks, empathy and personalized guidance form the core features of libraries. The Librarian will remain a trusted guide on information needs that are either complex or emotive.

3. The role of librarian cataloguer in the AI revolution

Once very detailed and precise, cataloging has been taken to an even more efficient and accurate level with automation through AI. Changes to this role include:

- a. **Automated Cataloging:** The AI tools classify the materials, especially through machine learning algorithms in NLP. This way, it extracts metadata, generates automatically tagged metadata, classifies the resources without a human expert's intervention, hence speeding up the cataloging for large digital volumes.

- b. **Metadata Generation:** AI can generate metadata from different types of content, like image, audio, and video, thus improving the discoverability of non-textual resources in library collections.

- c. **Quality Control:** AI enables cataloguers to spot errors and records that are not complete, keeps the catalogs updated, and supports librarians in the quality control of standardized cataloging between various institutions.

- d. This helps in facilitating Linked Data and the Semantic Web. The cataloguers will handle linked data that is process-able through AI. The interlinking databases allow the improvement in access across the networks of libraries and increased interoperability of catalogs.

3.1. Role of cataloguer librarian: Traditional and AI-enhanced.

The role of the librarian cataloguer has been developing significantly with new developments in AI and automation. While the basic objective of cataloguing-organizing, classifying, and providing access to information-is the same, the tools and methods are bound to change. Following are the key ways AI is shifting this role:

3.2. Automatic cataloging and metadata generation

AI technologies, such as machine learning and natural language processing, are already automating metadata creation for newer materials. This is a job that used to be done by cataloguers who would scan items and create their record. AI systems can now scan texts for key data so much faster and generate metadata to free up manifold time and enhance efficiency.

For example,

- a. OCR/NLP allows AI to read the documents' content and create catalogues on their own.
- b. There is the classification of materials by genre using machine learning algorithms, hence reducing much manual classification.

3.3. Enhanced search capacity

AI enables better information discovery with intelligent searching. This is not simple matching of keywords but uses semantic search and underlines context at the time of query so returns results far better and in tune with user intention. For this, cataloguers can help in configuration and maintenance of such a system for maximum library access.

- a. Algorithms for contextual and fuzzy searches allow for the extraction of subtle information even from imprecise queries.
- b. All types of recommendation systems, from Amazon to Netflix, predict what resources a user might be interested in, relocating the cataloguer into the domain of user experience and resource discovery.

3.4. Enhancing data entry and error checking

AI reduces inconsistency, duplication and lost cataloging resulting from human mistakes. All of these features are indicated. After the intervention, the record can be verified and enriched, with AI helping the cataloguer concentrate on quality control and complex metadata, not on lots of data input. Automated deduplication keeps catalogues clean and accurate. Data validation tools flag errors found in bibliographic entries, such as incorrect author, title, or missing information.

3.5. Metadata and linked data enrichment

AI can be used to enrich metadata by interlinking resources and improving the linking between records to promote the finding of related materials. This has become essential in several linked data projects such as the Semantic Web, where new relationships of data are dynamically built using data from other sources. Cataloguers can take on curatorial responsibilities to ensure metadata accuracy and support overall large data sets.

- a. AI automatically augments the metadata with the interlinking to external resources like DBpedia, Wikidata, or library authority files.
- b. AI can recommend further enhancements in metadata formats that keep libraries up-to-date with the new standards.

3.6. Evolving competencies for cataloguers

- a. Automation of cataloguing indeed requires new skills from both librarians and cataloguers; within the clear centre of technical skills that are related to machine learning and data analysis, there will certainly be a high demand for metadata standards and user-centred design.
- b. Cataloguers can supervise the systems using AI, train them using curated datasets, and ensure that whatever automation is done meets the standards set for libraries.
- c. Besides, cataloguers may need to get acquainted with data curation and governance in view of ethical uses of AI, data privacy, and data precision.

3.7. AI-driven collaboration and international catalogues

It will also improve collaboration between libraries in integrating world catalogs and improving bibliographic data exchange. AI identifies and systematizes cataloging discrepancies so it would be easy to share the unified global catalogue. Cataloguers have to talk to the AI to ensure interoperability of data at the local and global level.

- a. AI collates records from various cataloguing systems to local standards and hence will make international resource sharing easier.
- b. Crowdsourced cataloguing platforms using AI as moderators, enabling user creation and refinement of records previously left to professional cataloguers.

3.8. Ethics and bias in AI

Along with a lot of benefits, AI brings along a number of challenges. There are issues of bias, quality, and ethics that the cataloguer has to sort out. AI systems are only as good as their training data, and usually, historical data reflects biases. This ranges from finding the bias to making the metadata inclusive, to the responsible use of AI in the presentation of such diverse perspectives. Cataloguers will need to consider the ethical effects of recommendations given through AI and search algorithms, particularly about diversity, representation and inclusion. They will help make sure that AI systems follow privacy regulations such as the GDPR in handling information related to users.

3.9. Curate and support information literacy

- a. The cataloguing performed by AI could free librarians for a greater emphasis on information literacy and user education in topics such as understanding the AI systems, the use of enhanced search capabilities, and the critical evaluation of AI system recommendations.

- b. Librarians may also assist the patrons in comprehending the AI suggestions and evaluating the quality of the information. They can provide training and support in understanding how AI impacts access to information and help users navigate the complexities of automated systems.

4. The role of the librarian concerning the management of AI

The librarian manager oversees the running of the Library Service and ensures that resources match User Needs.

4.1. AIs are increasing these responsibilities in some new ways

- a. Data-driven decision-making becomes possible as AI supports library management with real-time analytics related to usage, resource popularity, and user feedback on decisions involving collection development, satisfaction, and efficiency tracking.
- b. **Managing Digital and AI Resources:** This would mean encompassing the inclusion of libraries for AI tools and digital services, taking into consideration users' needs for privacy and security with ethics in mind.
- c. **Staff Training and Adoption:** The librarian-managers themselves do the training in their place in order for the library staff to be able to use such AI resources and avoid being misled by the outcomes.
- d. **Leadership of Innovation:** Taking the library into the future, the managers encourage innovation in modern technologies and advocate for ethics in the use of AI.
- e. **Resource Allocation:** AI enhances resource allocations including finance and human capital. The power of AI can be extended to managers for efficient use in predicting trends, automatic scheduling, and creation of new needs, such as digital collections or service models.

4.2. AI greatly impacts the roles of libraries

- a. **Smarter efficiency:** AI automates cumbersome tasks to free the librarians to attend to high-order functions.
- b. **Enhanced services:** Libraries can provide more tailored, adaptive, and agile services using AI systems.
- c. **Better research and learning:** AI will help librarians serve patrons by doing research, finding information, and analyzing data.
- d. The librarian will need to get accustomed to the changes in technology while constantly updating skills on data analysis, ethics in AI, and machine learning.
- e. **Ethics engagement:** By embedding AI in library work, librarians are doing everything in their power to tackle issues such as bias and privacy while showing transparency with respect to how libraries stand in service as ethical information stewards
- f. The AI revolution in the work of librarians is to grasp new skills, to create opportunities for innovative services, better services, and high engagement of users.

4.3. Librarian's role: Management, traditional, and AI-enhanced

This is where AI meets library management. In the near future, it is bound to develop considerably due to both technological advancement and rising demands for efficiency, access, and personalization in libraries. Some of the key areas where AI is likely to come into play include:

4.3.1. Advanced cataloging and metadata maintenance

a. Automated cataloging: Through AI, the automatic cataloging, where metadata is drawn in the form of the author, subject, and keywords from within the text and image and audio-visual content, can be done. It also performs NLP on the digital book, article, or multimedia and applies the subject heading and classification number.

b. Smart search: Artificial Intelligence allows the user to instinctively know how to use the search and makes it fast. AI search engines understand the context of the user query-semantics search, instead of literal keywords; therefore, very approximate queries provide much better results.

4.3.2. User's personal experience

a. Recommender Systems: It would be able to recommend related books or resources based on user behavior, using algorithms similar to those of Netflix or Spotify. It improves with experience; therefore, it suggests materials that might have never been found by the user himself.

b. Virtual Assistants: Libraries can implement AI-powered chatbots to provide 24/7 support in finding materials, explaining policies, and guiding users on resource usage. The use of conversational search helps the assistant answer queries in natural language and then provide routes to appropriate services.

4.3.3. Data-informed decisions

a. Analytics of Usage: Through AI analysis, it identifies the usage pattern of the library in terms of what materials are being checked out, when, and by whom. Therefore, this provides a guide to libraries in terms of optimizing through the identification of highly utilized materials and their gaps in the collection.

b. Predictive analytics: AI analyzes past trends for predictions, such as what types of resources would be in high demand and the kind of collection that needs to be developed or expanded.

4.3.4. Digital preservation

a. Digitization and Preservation of Rare Material: AI accelerates the process of digitization in cases where materials are rare, such as books and other ancient documents. The tools used in this regard include optical character recognition that transcribes the text from the scans and image recognition that enhances the quality of digitized images to a more accessible extent.

b. Condition monitoring: AI in condition monitoring of library material helps by identifying degradations

occurring in books and manuscripts through machine learning combined with sensors for their preservation before it gets too late.

4.3.5. Access & inclusion

a. Assistive Technologies: AI has facilitated the availability of text-to-speech and speech-to-text technologies for diverse abilities. Translation tools have also been utilized in libraries for translating works to different languages, thus widening the reach for access to knowledge globally.

b. Voice-activated services-let users utilize voice AI assistants such as Alexa, Google Assistant, or Siri-to access catalogs, information, and other library spaces with relative ease, with no need to interact with a more traditional interface.

4.3.6. Resource management and automation

a. Automated Inventory Control: Big libraries can use AI robots or drones to handle missing book stock management, its reviewing, and shelving of books. The use in maintaining the collections is rather less time-consuming.

b. Supply Chain Optimization: AI helps the library in enhancing its ordering, prediction of demand, and relevance to arm collections accordingly.

4.3.7. Assisting research and improving learning

a. AI Research Assistance: Libraries can become involved in the provision of personalized assistance using AI. AI may recommend papers, summarize the content, and outline research topics, all at the request of the user.

b. Collaboration Tools: AI is already helping library users by suggesting potential collaborators, analyzing the data, and even writing sections of research papers.

4.3.8. Ethics and privacy

a. Bias and Fairness: The use of AI in library management is not supposed to be biased. Libraries should keep a close watch on the same so that stereotyping does not appear within the catalogs, recommendations, or decision-making.

b. Privacy: Many sensitive data of users are dealt with in libraries; therefore, any AI systems deployed have to meet set standards for privacy. They have to balance the use of AI with confidentiality for users and security of their data.

4.3.9. Smart space & iot integration

a. Smart Libraries: IoT devices allow AI to track the space usage of reading rooms or study areas effectively, thereby aligning lighting, heating, and air conditioning in real time.

b. Smart Checkouts: Enabled by AI systems to apply RFID and directly conduct checkouts and return of books.

Conclusion

AI is going to evolve, but the missions of librarians are not going to change—they are designated to help in finding information and supporting learning. Artificial intelligence is developing library services, but it is very important that librarians constantly train and adopt new technologies. It is a very important mission in general, considering providing navigation through the world of information. AI would make them technical assistants that help one negotiate the virtual world rather than the guardians of information. The above axiom naturally follows that their role as educators and advocates becomes all the more imperative in a high-tech environment. The librarians of the future created by AI will have to be nimble and imperative. AI automates some of the work done by reference librarians so they can continue with more complex questions that require human judgment. It moves the librarian from an information service provider to a knowledge curator and an ethical guide through personalized AI services. Libraries have always aided people in finding information, and this will further enable librarians to help the users directly. It automates the job of cataloging and does simple tasks, freeing time for librarians and cataloguers to do complex user-based work. As compared to earlier, hard work was required to sort and do data entry, now more importance has been given to technical skills, ethical considerations and knowledge enhancement through online resources. This means that librarians will continue playing their roles in information management, including aiding AI towards meeting user needs. Librarian cataloging is meant to enhance human information management, not to be replaced by AI. That would turn libraries from passive storage into vivid, user-oriented ones. The technologies discussed provide an enhancement in service effectiveness and user experience—the smarter and more accessible people become. Later in the future, with the increased application of AI, ethical and privacy issues, as well as equity challenges, will become more critical in the library context. The main values which shall not be renounced within the integration of new services are openness, accessibility, and privacy.

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