

TRANSFORMING INFORMATION ACCESS

Shaping the Future of Personalised Learning and Research in Dubai

WHY ORGANISING AND INDEXING LIBRARIES IS A CHALLENGE GLOBALLY

Libraries worldwide play a crucial role in providing access to information and resources, with over 410,000 public libraries globally serving as hubs for literacy and education¹. In 2023, 662 million e-books, audiobooks, and digital magazines were borrowed from libraries worldwide, resulting in a 19% increase from the previous year², highlighting the growing importance of digital services. However, librarians face significant challenges in organising and indexing content for easy access. These include adapting to rapidly evolving information and communication technologies, managing the “knowledge explosion,” and implementing effective metadata and search systems. **Financial constraints and the need for continuous skill updates further complicate efforts to maintain accessible and up-to-date knowledge libraries, requiring librarians to embrace roles as digital information specialists in the modern knowledge economy.**



KEY STATISTICS



There are over

**2.8
million**

libraries globally, serving as key institutions for knowledge dissemination and cultural preservation.¹



In 2023,

**662
million**

e-books, audiobooks, and digital magazines were borrowed from libraries worldwide, reflecting a 19% increase from the previous year.²



In 2022, Dubai's public libraries received approximately

**271,500
visitors**

highlighting their role as community hubs for learning and engagement in the UAE.³

HOW DOES IT LOOK LIKE IN DUBAI?

Dubai's libraries, particularly the Mohammed Bin Rashid Library (MBRL), opened in 2022, housing over 4.5 million printed, digital, and audio books⁴, are making significant strides in enhancing access to knowledge and cultural resources. The MBRL, for example, launched the "A World in Your Language" initiative, which allows readers to access books and resources in 13 different languages using AI technology, aiming to bridge cultural gaps and enhance knowledge accessibility for Dubai's diverse population⁵. In 2023, there were over 432,500 Arabic language resources and nearly 109,000 foreign language resources, highlighting their extensive collection⁶. Libraries in Dubai, like others worldwide, face challenges in indexing vast collections, especially summarising books in Arabic, to enhance recommendations and improve visitor experiences.



HOW AI WILL SOLVE THIS CHALLENGE

AI can significantly enhance the organisation and summarisation of library collections by automating cataloging and metadata management, thereby improving the efficiency and accuracy of indexing content. AI algorithms can analyse and classify large volumes of digital content, assign metadata tags, and organise resources efficiently, which streamlines the retrieval process and enhances user accessibility. Additionally, AI tools can assist in text analysis and summarisation, extracting key insights and trends from textual content to facilitate research and decision-making processes. By integrating AI technologies, libraries can transform their operations, improve resource discoverability, and offer personalised user experiences, adapting to the evolving needs of patrons in the digital age.

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THE IMPACT OF USING AI FOR DUBAI

The integration of AI in Dubai's libraries will significantly transform their operations by automating cataloging, enhancing resource discoverability, and providing personalised user recommendations. AI algorithms streamline the organisation of library materials by analysing vast amounts of data and assigning metadata, which improves search functionalities and information retrieval for users. AI-powered recommendation systems analyse user behavior and preferences to offer tailored suggestions. Additionally, The AI system will allow libraries to summarise millions of books making the visitor experience easier and exiting.

CITATIONS

¹ High Point University Library, "Libraries Around the World," <https://www.highpoint.edu/library/2023/06/12/16252/>, accessed 2024.

² OverDrive, "Libraries Achieve Record-Breaking Circulation of Digital Media in 2023," www.company.overdrive.com/2024/01/04/libraries-achieve-record-breaking-circulation-of-digital-media-in-2023/, accessed 2024.

³ Statista, "Dubai Public Library Members and Visitors," www.statista.com/statistics/1415900/dubai-number-of-public-library-members-and-visitors/, accessed 2024.

⁴ Wikipedia, "Mohammed Bin Rashid Library," en.wikipedia.org/wiki/Mohammed_Bin_Rashid_Library, accessed 2024.

⁵ Dubai Media Office, "World in Your Language Initiative," www.mediaoffice.ae/en/news/2023/September/20-09/Mohammed-Bin-Rashid-Library-Launches-A-World-in-Your-Language-Initiative, accessed 2024.

⁶ Statista, "Dubai Information Resources," www.statista.com/statistics/1415928/dubai-number-of-information-resources-at-public-libraries-by-type/, accessed 2024.