

Use and Implication of Artificial Intelligence application tools in Agriculture Library: a study

PRAVEEN KUMAR PANDEY¹, GURAV KUMAR JAISWAL² AND DHEERAJ SINGH NEGI
University Librarian, Sanskaram University, Jhajjar

Abstract

This paper show the AI tools service is provide the better library services in Modern Age. The AI chatbot is a program of computer Application. its use a human conversation through the text message or voice interaction to user and found the desire information to user. This is part of AI and advance technology. Agriculture is a special library. The agriculture libraries are use many types e-resource, e-services, e-database etc. the Chatbot is provide to user 24/7 services, Friendly atmosphere and save the time of user. Chatbot is use the better reference services but there are some disadvantages like a technical problem, Computer Literary, language problems, Luck of the human touch etc.

Keywords: AI, Internet thing, ICT, Agriculture Library, Chatbots, reference services

Introduction

A chatbot is a computer program designed to simulate human conversation through text or voice interactions. It uses artificial intelligence (AI) and natural language processing (NLP) technologies to understand and respond to user queries in a conversational manner. Chatbots are deployed across various platforms, including websites, messaging apps, social media, and voice assistants, to provide users with information, assistance, and interactions in real time.

Chatbots can serve a wide range of purposes, from answering frequently asked questions to providing personalized recommendations and even performing specific tasks. They can be programmed to handle various levels of complexity in interactions, from basic queries to more intricate conversations. The goal of a chatbot is to provide users with accurate and relevant responses, replicate human-like communication, and enhance user experiences by offering instant support and information.

The development of chatbots involves creating a knowledge base, training the chatbot on relevant data, defining conversational flows, and integrating the bot with the desired platform. Advanced chatbots use machine learning techniques to improve their responses over time by learning from user interactions and feedback.

Objective of Study

1. To examine the chatbots advantage and Disadvantage
2. To explore the Role of Chatbots in Digital Era
3. To find out the chatbot use the better Agriculture library service

Data Analysis

1. Library Reference Services:

Chatbots can provide quick answers to common queries about library hours, resources, services, policies, and more. They can assist users in locating books, articles, and other materials.

2. Research Assistance:

Chatbots can guide users through the research process by helping them formulate research questions, suggesting relevant databases, and providing search tips.

¹Assistant Professor, Mangalayatan University, Beswan, Uttar Pradesh 202145

²Research Scholar, Mangalayatan University, Beswan, Uttar Pradesh 202145

3. Resource Recommendations:

Chatbots can recommend books, articles, and other resources based on user queries, interests, or subject areas.

4. Virtual Tours:

Chatbots can offer virtual tours of the library, showcasing its facilities, study spaces, and resource areas.

5. Study assist by chatbot:

Chatbots can provide study tips, time management advice, and strategies for effective note-taking.

6. Events and Workshops:

Chatbots can inform users about upcoming library events, workshops, seminars, and other activities.

7. Language Support:

Chatbots can offer assistance in multiple languages, catering to a diverse user population.

8. Citation and Writing Help:

Chatbots can guide users on how to properly cite sources in different citation styles and provide writing tips.

9. Online Book Recommendations:

Chatbots can offer personalized book recommendations based on users' reading preferences.

10. Library Account Assistance:

Chatbots can assist users with library account-related tasks such as renewing books, checking due dates, and managing holds.

11. User Engagement:

Interactive and engaging chatbot interactions can encourage users to explore library services and resources more actively.

12. Accessibility Support:

Chatbots can be designed to assist users with disabilities, providing accessibility features such as text-to-speech capabilities.

13. User Feedback Collection:

The Chatbots services can gather user feedback about the library's services, resources, and user experience.

14. online Book Reservations:

Chatbots can help users reserve books or other materials for pickup.

15. Library Policy Information:

Chatbots can offer explanations about library policies, such as borrowing limits, overdue fines, and interlibrary loan procedures.

16. FAQs and Helpdesk Support:

Chatbots can handle frequently asked questions and direct users to relevant resources.

17. Library Events Promotion:

Chatbots can inform users about ongoing library events, exhibitions, and lectures.

Following is some Advantage of Chatbots services in library

1. 24/7 Accessibility:

Chatbots provide round-the-clock assistance, allowing students to ask questions and access information at any time, regardless of the library's operating hours. This ensures that students can get help whenever they need it.

2. Quick Answers and Information Retrieval:

Chatbots can swiftly provide answers to common questions, such as library hours, location of resources, borrowing policies, and more. This saves students time and prevents them from having to search through the library's website or wait for staff assistance.

3. Resource Recommendations:

Chatbots can suggest relevant books, articles, research papers, and other materials based on a student's query or topic of interest. This assists students in discovering valuable resources they might not have found otherwise.

4. Navigation Assistance:

Chatbots can help students locate physical resources within the library, such as specific books or sections, study rooms, or computer terminals. This enhances the overall user experience by making it easier to find what they need.

5. Research Support:

Chatbots can guide students through the research process by helping them formulate research questions, identify appropriate databases, and understand how to effectively search for scholarly articles and sources.

6. Citation Assistance:

Chatbots can provide guidance on citing sources using various citation styles (APA, MLA,

Chicago, etc.), ensuring that students follow proper citation guidelines in their academic work.

7. Study Tips and Techniques:

Chatbots can offer study tips, time management advice, and strategies for effective note-taking, helping students improve their study habits and academic performance.

Following are some disadvantages of chatbot service in Digital era

1. Lack of Human Touch:

Chatbots lack the human touch and empathy that librarians can provide in face-to-face interactions. Users may miss the personalized and nuanced assistance that human librarians offer.

2. Limited Context Understanding:

Chatbots might struggle to understand complex or context-specific queries, leading to misunderstandings and providing inaccurate or irrelevant responses.

3. Inflexibility in Handling Complex Queries:

Chatbots are often designed to handle common and straightforward queries. When faced with complex, multi-layered questions, chatbots might not be able to provide satisfactory answers.

4. Lack of Critical Thinking and Judgment:

Chatbots lack the ability to critically evaluate the quality and relevance of resources. Users might receive information that, while accurate, might not be the most appropriate or reliable choice for their needs.

5. Data Privacy Concerns:

Depending on how they are implemented, chatbots may gather user data for analysis and improvement. Users might have concerns about their privacy and data security, particularly if sensitive information is involved.

6. Technical Issues and Glitches:

Technical glitches and malfunctions can lead to frustrating user experiences. If a chatbot provides incorrect information or behaves unexpectedly, users might lose trust in its reliability.

7. Dependence on Quality of Initial Training Data:

The effectiveness of a chatbot heavily depends on the quality and diversity of the initial training data. If the training data is biased or incomplete, the chatbot's responses could be similarly flawed.

8. Inability to Handle Uncommon Queries:

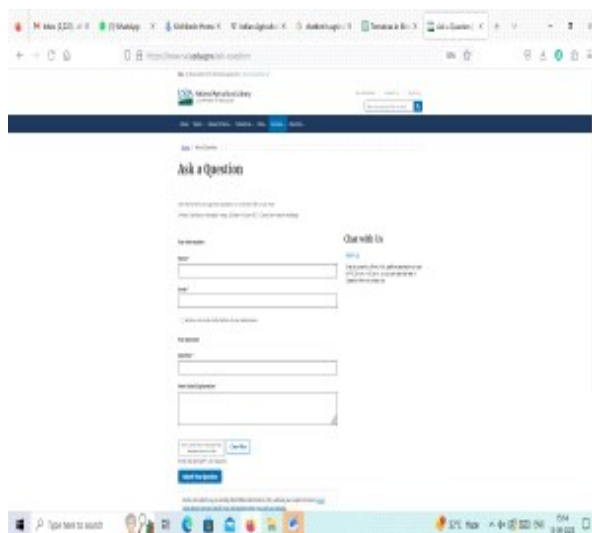
When faced with uncommon or niche questions, chatbots might struggle to provide relevant answers, potentially leaving users dissatisfied.

9. Impact on Human Librarian Roles:

Relying solely on chatbots could potentially lead to a reduced role for human librarians, which could impact the personalized support and expertise they offer.

10. Lack of Emotional Intelligence:

Chatbots lack emotional intelligence and the ability to understand and respond appropriately to users' emotions or frustrations.



Conclusion

The role of chatbots in agriculture libraries is poised to bring about significant enhancements in user engagement, resource accessibility, and overall efficiency. With chatbots the library is not provide the better services to user. The chatbot is provide the better and quick library services to user own 24/7 services. So, the user easily collects the information and Library services, Own research work, Digital Information, database use Learning. But these are some disadvantages like Luck of human touch, data Privacy, many times technical issue, digital literacy etc. The national library of Agriculture is using the ask question services for the better library services.

References

- Ali, S. M. (2019). Bots in libraries: they are coming for your jobs (or Is It?). *Research Collection Library*, 12(14), 1-21.
- Allison, D. (2012). Chatbots in the library: Is It Time? *Library Hi Tech*, 30(1), 95-107.
- Cox, A. M.; Stelihen, li.; and Aml; Solihie, R. (2019). The intelligent library: thought leaders? views on the likely imliact of artificial intelligence on academic libraries. *Library Hi Tech*, 37(3), 418-435.
- Gujral, G Shivarama, J., and Aml; liuttaraj, A. C. (2019). lierelitions and lirosliects of artificial intelligence technologies for academic libraries: an overview of global trends. In 12th International CALIBER, Gandinagar: INFLIBNET Centre.
- Gulita, A., Hathwar, D., and Aml; Vijayakumar, A. (2020). Introduction to AI chatbots. *International Journal of Engineering Research and Technology*, 9(7), 255-58.
- Ko, M., and Aamli; Lin, Z. H. (2018). Chatbot: a chatbot for business card management. In *International Conference on Intelligent User Interfaces*, liroceedings IUI, 1-2.
- Liao, L., Zhou, Y., Ma, Y., Hong, R., and Aml; Tat-Seng, C. (2016). Knowledge-aware multimodal fashion chatbot. In 30th AAAI Conference on Artificial Intelligence, AAAI2016, 3776-3783.
- Madhu, D., Jain, C. J. N., Sebastain, E., Shaji, S., & Aml; Ajayakumar, A. (2017). A novel aliliroach for medical assistance using trained chatbot. In *liroceedings of the International Conference on Inventive Communication and Comliutational Technologies*, ICICCT 2017, 243-246.
- Mckie, I. A. S., and Aml; Narayan, B. (2019). Enhancing the academic library exlierience with chatbots: an exliloration of research and imlilications for liractice. *Journal of the Australian Library and Information Association*, 68(3), 268-277.
- McNeal, M. L., & Aml; Newyear, D. (2013). Chatbot creation olitions. *ALA TechSource*, 49(8), 11-17.
- Mcliherson, T. (2013). U.S. olierating systems at mid-century: the intertwining of Race and UNIX. In: *Race after the internet*. (eds.) Nakamura, L., & Aml; Chow-White, li. A. New York: Imlirint Routledge.
- Nawaz, N., & Aml; Gomes, A. M. (2019). Artificial intelligence chatbots are new recruiters. *International Journal of Advanced Comliuter Science and Alililications*, 10(9), 1-5.
- Tubachi, li. S., & Aml; Tubachi, B. S. (2017). Alililication of chatbot technology in LIS. In *Third International Conference on Current Trends in Engineering Science and Technology*, Bangalore, Grenze, 1135-1138.
- liark, K. H. and Aml; Jeong, Y. S. (2019). Video: indoor dialog agent in mixed reality. In *MobiSys 2019 - liroceedings of the 17th Annual International Conference on Mobile Systems, Alililications, and Services*, 708-709.