**Research Proposal**

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**Unit:** 16  
**Research Topic:** Impact of Artificial Intelligence Chatbots on Consumer Experience and Satisfaction in Nepalese E-commerce

**Section One: Title, Objective, Responsibilities**

**Introduction**

In the digital age, e-commerce has become a dominant force in global retail, with artificial intelligence (AI) playing a crucial role in shaping consumer experiences (Acharya, 2023). Among the AI tools, chatbots have emerged as a significant innovation in electronic customer relationship management (e-CRM), particularly for enhancing user satisfaction and improving business performance. In Nepal, where the e-commerce sector is rapidly evolving, understanding the impact of AI-powered chatbots on user satisfaction remains an area requiring thorough academic exploration (Ugli, 2025).

This research aims to investigate the influence of chatbot features on consumer satisfaction and purchase decisions in Nepalese e-commerce platforms. The study will analyze user interactions with chatbots and identify the most impactful features contributing to positive user experiences and commercial outcomes.

**Title**

Impact of Artificial Intelligence Chatbots on Consumer Experience and Satisfaction in Nepalese E-commerce

**Research Project Aims and Objectives:**

**Aim:**  
To assess how chatbots driven by AI affect customer satisfaction, experience and buying patterns in Nepal's e-commerce sector.

**Objectives:**

* To identify key chatbot features that contribute to customer satisfaction.
* To analyze how chatbot responsiveness, communication style, and usability affect consumer decisions.
* To compare chatbot performance with human customer service agents.
* To explore how machine learning and natural language processing (NLP) can enhance chatbot functionality.
* To develop a locally optimized chatbot prototype tailored to Nepalese e-commerce.

**Section Two: Reasons for Choosing This Research Project**

My academic focus on cutting-edge technologies in e-commerce and artificial intelligence aligns perfectly with the subject of this research. I have selected the topic "Impact of Artificial Intelligence Chatbots on Consumer Experience and Satisfaction in Nepalese E-commerce" because it directly connects with both my ongoing IT coursework and my personal interest in leveraging AI to enhance user experience and drive business success. Despite the rapid growth of Nepal’s e-commerce industry, there remains a significant gap in understanding how AI-powered chatbots are integrated and perceived in the local context. This project provides a valuable opportunity to explore both the challenges and benefits of implementing AI-driven chatbots in real-world business environments. Additionally, it allows me to develop practical skills in areas such as machine learning, data analysis, and chatbot development — all of which are essential for my future career in the IT sector.

**Section Three: Literature Sources Searched**

A comprehensive review of academic and industry literature has been conducted to support the research questions and objectives. Key sources include:

Acharya, S. (2023): <https://www.theseus.fi/bitstream/handle/10024/807998/Acharya_Shiva.pdf?sequence=4>

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Tan & Lim (2023) – Factors influencing user satisfaction with e-commerce chatbots.

Link: <https://myjms.mohe.gov.my/index.php/ijbtm/article/view/21952>

Oktavia & Arifin (2024) – AI chatbot impact on purchase decisions.

Link: <https://www.jatit.org/volumes/Vol102No19/29Vol102No19.pdf>

Hsu & Lin (2023) – User satisfaction and loyalty with chatbots.

Link: <https://www.sciencedirect.com/science/article/pii/S0969698922003046>

Luo et al. (2022) – Comparison between human and AI customer support.

Link: <https://www.sciencedirect.com/science/article/abs/pii/S0747563222001510>

Ugli (2025) – AI impact in emerging economies including e-commerce.

Link: <https://cyberleninka.ru/article/n/analysis-of-artificial-intelligence-impact-on-e-commerce-in-emerging-economies>

These sources include theoretical frameworks, empirical examples, and statistical data about the deployment of AI chatbots, with an emphasis on usability, satisfaction, and business results.

**Section Four: Activities and Timescales (Milestones and Target Date)**

| **Activity** | **Target Date** | **Duration** |
| --- | --- | --- |
| Topic Selection and Proposal Drafting | 10–15 June 2025 | 5 days |
| Literature Review | 15–25 June 2025 | 10 days |
| Questionnaire and Interview Design | 26–30 June 2025 | 5 days |
| Data Collection (Surveys/Interviews) | 1–10 July 2025 | 10 days |
| Case Study Research (Local E-commerce site) | 5–15 July 2025 | 10 days |
| Data Analysis (Sentiment/Statistical) | 11–20 July 2025 | 10 days |
| Chatbot Prototype Development | 15–25 July 2025 | 10 days |
| Draft Writing of Report | 20–30 July 2025 | 10 days |
| Final Report Submission | 1 August 2025 | - |

**Section Five: Research Approach and Methodologies**

**Research Approach:**

This study will use a mixed-methods approach, integrating both qualitative and quantitative research methodologies to get a comprehensive grasp of the topic.

**Methodologies:**

* **Surveys**: To collect data from Nepalese online shoppers regarding chatbot usage.
* **Interviews**: To obtain in-depth insights from frequent e-commerce users and customer service experts.
* **Case Study**: Analysis of a leading Nepalese e-commerce platform using chatbot support.
* **Google Form**: To ask users/customers their opinion regarding chatbot and their experience while using it.
* **Sentiment and Statistical Analysis** – To measure satisfaction levels, identify pain points, and interpret customer attitudes.
* **Prototype Development** – Creation of a basic chatbot model using JavaScript, NLP, and machine learning for demonstration and testing.

**Research Areas Will Cover:**

* AI and chatbot integration in e-commerce
* Customer satisfaction and user experience metrics
* Comparative analysis with traditional human agents
* NLP and machine learning in chatbot optimization
* Local consumer behavior patterns and expectations

# References

Acharya, S., 2023. *Study of the effectiveness of chatbots in customer service on e-commerce websites,* s.l.: HAME UNIVERSITY OF APPLIED SCIENCE.

Ugli, M. S. A., 2025. Analysis of Artificial Intelligence Impact on E-Commerce in Emerging Economies. *Raqamli Iqtisodiyot (Digital Economy),* Issue 10, pp. 116-129.