4. A Study On Uses of Artificial Intelligence in Online Shopping

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ABSTRACT:

Artificial Intelligence plays an important role in enhancing online shopping experience for the customers and retailers. Many retailers like amazon, flip kart, etc. Uses AI technology to detect the address and location of customers for better and on time product delivery. Research based on customer awareness about AI tools and techniques used while shopping online for finding products easily, customers feels secure or feel risky while doing online shopping. I used data from Navi-Mumbai and my native place Amravati district people to find the awareness of AI and their behavior about online shopping. The findings indicate that the customers like to buy online or not and the reasons behind it.

KEYWORDS:

Artificial Intelligence, Online Shopping, Customer, Retailer.

1. Introduction:

Artificial intelligence (AI) is revolutionizing online shopping, enhancing the overall experience for customers and retailers alike. It used to predict and analyze customer behavior and preferences, helping retailers optimize inventory, pricing, and promotions. This research shows the users are benefiting from online buying and selling with AI technologies, although this research benefits in customer experience, conventions and sales, operational efficiency, product discoverability, customer insights and analytics.

Many types of retailers are involved in business like Amazon, eBay, Alibaba, Walmart, Target, etc. and are able to enhance customer experiences, optimize operations and drive business growth. Generative AI technology gives responses to many questions like "What should I wear on a particular festival or on a Birthday Parties", also the new trending fashions recommendation. "This is big," said Arit Mondal, director of product management at Myntra. Customers can filter their choices and budget products online. AI can monitor the user's purchase to recommend their choices in future. Through emails, the customers can get reminders of left items in a cart to complete their purchases.

The integration of AI in online shopping has transformed the industry, enabling retailers to provide a more personalized, efficient, and secure shopping experience for customers. Online shopping experiences become more efficient, personalized, and secure, driving customer satisfaction and retailer success. Therefore, it is more important to monitor the consumer behavior data for online shopping and predict market changes in a timely manner.

For social development, the number of Internet users will continue to expand in the future, creating a very favorable market for the development of online shopping. A knowledge-based online shopping customer behavior analysis and prediction system is proposed to address the above situation. The real-time prediction of online shopping customer behavior is accomplished based on the real-time browsing behavior data and personal data of customers, as well as the existing knowledge in the machine knowledge database.

2. Objectives:

- To identify and track customer demographics, emotions and behavior
- To find out the reasons behind if customers refrain from doing online shopping or using AI technologies.
- To suggest how to overcome fear of customers.

3. Review of Literature:

- Ashish Mehta-(2021) CHANGING TREND IN ONLINE SHOPPING - A STUDY OF MUMBAI SUBURBS states in his paper that AI and Machine learning models gives more benefits to customers in terms of security and more discounts rate due to increase rate of companies and new brands in markets.
- Kothari P. Pritam, Maindargi S. Shivganga-(2016), A Study on Customers Attitude towards Online Shopping in India and its Impact: With Special Reference to Solapur City states that majority of users rely on online shopping but some are still want to do shopping manually, the reason behind this is users want to see the product before purchase and in online shopping these things never happen.

4. Methodology:

**Data Collection:**

Primary Data:

In order to fulfill my objectives, a sample study was taken using the well-formed questionnaires. This data has been generated only from Maharashtra's two region population i. Navi Mumbai ii. My town Amravati district. Respondents were selected based on the important aspects such as their Gender, Age, Annual income, Occupation, Frequency of shopping and so forth.

5. Limitations of Study:

- Sample size for statistical measurements is low as per the requirement
- Time constraints.

## 6. Analysis and Interpretation of Data:

1. Age of the maximum respondents are in the range 20 to 45 years, people from this group are very keen to shop online.
2. Frequency of online shopping in Respondents are: Maximum user's statistics are monthly basis (57.5%)
3. Analysis said that maximum 60% users are not using AI application, 30% are using AI applications and 10% users are neutral
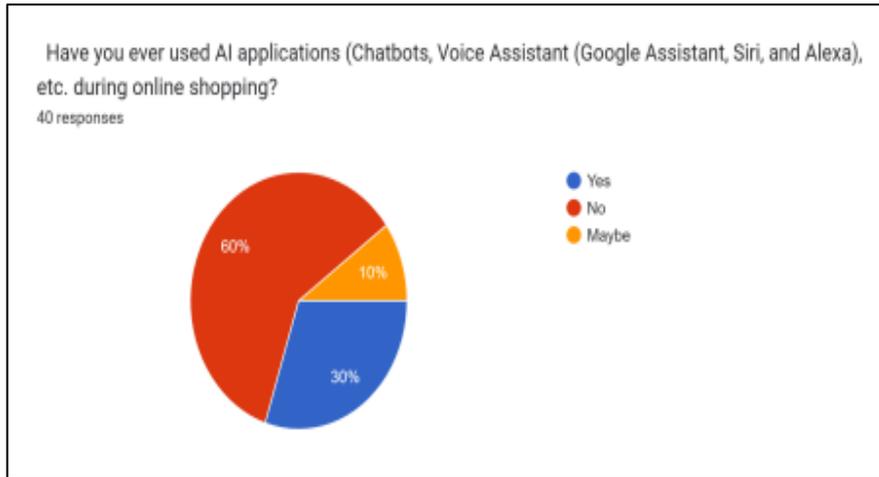
4. Respondents prefer online shopping because it saves time, various offers on online products and open 24/7, wide range of choices or big range of products/brands available.
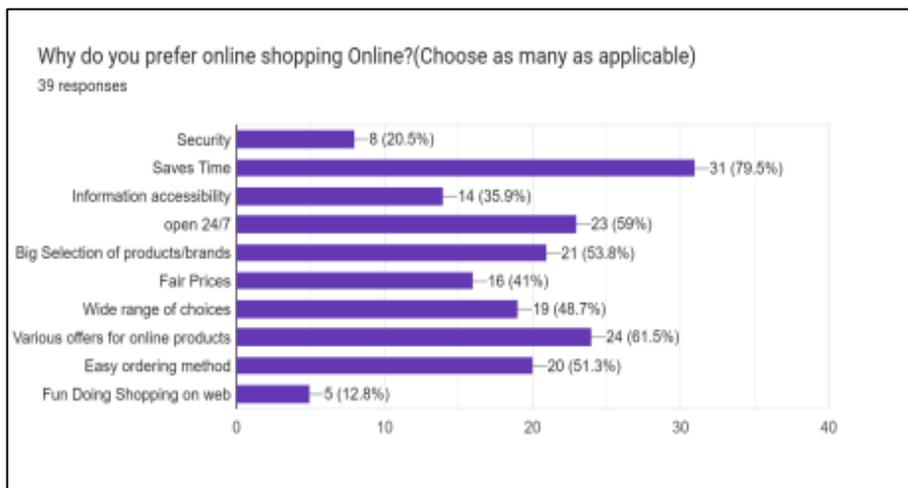
5. Respondents do not prefer online shopping because they do not find whatever they looking for, some days they do not trust online shopping,
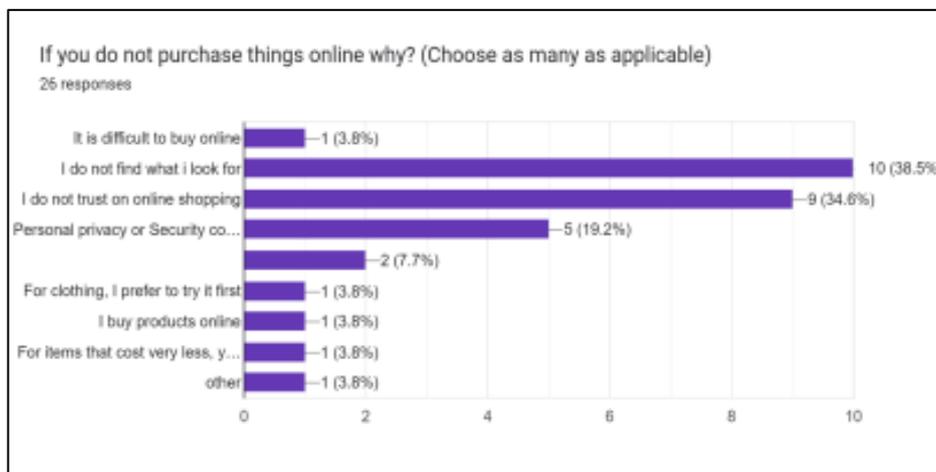
6. Maximum of respondents feel safe while using different AI applications for online shopping, some are neutral and very few says they are not feeling safe.

I feel safe while using AI applications in online shopping
38 responses

[Bar chart showing: 1: 7 (18.4%), 2: 14 (36.8%), 3: 10 (26.3%), 4: 5 (13.2%), 5: 2 (5.3%)]

7. Many of the respondents (i.e. 36%) say they are afraid of data leakage and 30% say they don't feel the risk, while 23% are neutral or indefinite about this.

I feel risk of private data leakage while using AI in online shopping
39 responses

[Bar chart showing: 1: 7 (17.9%), 2: 11 (28.2%), 3: 9 (23.1%), 4: 9 (23.1%), 5: 3 (7.7%)]

8. 57.8% of the respondents are aware of AI tools used in online applications. 29% respondents don't have knowledge about AI tools, while 13.2% respondents are neutral.

I am aware of AI tools used for online retail
38 responses

[Bar chart showing: 1: 11 (28.9%), 2: 11 (28.9%), 3: 5 (13.2%), 4: 6 (15.8%), 5: 5 (13.2%)]

9. Analysis for the percent of respondents who feel that infrastructure has been developed or not developed is given in below graph.

7. Findings and Conclusion:

In this research, findings were how the view of customers changes from time to time about online changes. The customers who were afraid of online shopping have a lack of awareness about AI applications and uses of AI tools and techniques in their daily life as if they were using it.

Suggestions: Customers must have knowledge about AI tools and techniques in a positive way which will reduce their risk and confusion data leakage. Customers should be aware of techniques like AI using security features like face detection techniques to secure their data.

Scope for Further Research: Need to do surveys about individual tools like chat bot, voice assistance, Micro AI, Prisync, etc. used by merchants to improve productivity and sales.

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