# A STUDY OF THE EFFECTIVENESS OF AI IN ENHANCING CUSTOMER ENGAGEMENT ON DIFFERENT E-COMMERCE PLATFORMS IN AMRAVATI CITY

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#### Abstract

This research delves into the role of artificial intelligence (AI) in boosting customer engagement on various e-commerce platforms in Amravati City. As businesses increasingly turn to technology, this study aims to understand how AI serves as a modern marketing tool that reshapes customer interactions. The first objective is to explore the ways in which AI enhances marketing strategies, making them more targeted and effective. The second objective focuses on the influence of AI-driven personalized recommendations and dynamic pricing on customer purchasing behaviour, investigating how these features can sway buying decisions and increase sales. Finally, the research looks at how personalized rewards programs and consistent communication, powered by AI, can strengthen brand loyalty among consumers. By addressing these objectives, the study seeks to shed light on the transformative power of AI in the e-commerce sector, particularly in Amravati City. The insights gained from this research will not only enhance our understanding of AI's impact on customer satisfaction but also provide practical implications for marketers and business owners looking to thrive in a competitive landscape. Ultimately, this study aims to highlight the potential of AI to create more meaningful connections between businesses and their customers.

*Keywords:* Artificial Intelligence (AI), Customer Engagement, Ecommerce, Personalized Recommendations, Brand Loyalty and Dynamic Pricing

### Introduction

The rise of ecommerce has revolutionized how consumers interact with brands, prompting businesses to innovate and enhance customer engagement. Amidst the competitive online retail landscape, Artificial Intelligence (AI) has become essential tool for deepening customer an relationships and optimizing the user experience on platforms. By leveraging ecommerce AI technologies, businesses can deliver personalized shopping journeys, improve customer service, and drive operational efficiency, transforming how brands connect with their audiences

AI enables ecommerce platforms to analyse data in real-time, offering insights into consumer preferences, forecasting buying behaviour, and providing tailored product recommendations. AIdriven solutions, including catboats, virtual shopping assistants, and personalized pricing models, enhance the customer journey by delivering quick, accurate responses and meeting customer needs effectively. These AI-powered innovations not only elevate customer satisfaction but also foster brand loyalty through engaging and seamless interactions. This study focuses on the application of AI in the ecommerce context of Amravati City, a growing market where technological adoption and consumer behaviour present unique challenges and opportunities. Unlike larger metropolitan cities, smaller urban areas like Amravati may exhibit varying degrees of familiarity with AI-based tools and services. Therefore, exploring the effectiveness of AI in

enhancing customer engagement, with a specific focus on purchasing behaviour and brand loyalty, is critical for understanding its local impact.

The significance of this research lies in its potential to uncover how AI tools influence consumer decision-making and long-term brand relationships in the ecommerce sector. By examining these two variables—purchasing behaviour and brand loyalty—this study will provide valuable insights into how businesses in Amravati City can optimize AI applications to cater to consumer needs, improve customer satisfaction, and gain a competitive edge in the market.

Moreover, as businesses worldwide continue to adopt AI technologies, the findings of this study will serve as a guide for smaller markets aiming to leverage AI effectively. This research will also highlight the challenges and opportunities associated with implementing AI in ecommerce, contributing to both academic literature and practical business strategies. Through this study, the role of AI as a driver of innovation and growth in the ecommerce sector will be thoroughly explored, emphasizing its impact on reshaping the customer journey in a dynamic and digital-first economy.

### Literature Review:

1. 'Journey of customers in this digital era: Understanding the role of artificial intelligence technologies in user engagement and conversion' (Gautam Shrivastava & Surajit Bag- 2021)

- Artificial Intelligence in E-commerce:
- Artificial Intelligence has revolutionized the industry, with businesses ecommerce increasingly adopting AI tools to enhance customer experiences. AI technologies, such as machine learning, natural language processing, and predictive analytics, allow ecommerce platforms to deliver more personalized and interactive shopping experiences. According to Chung (2020), AI facilitates the automation of customer interactions and enhances product recommendations by analysing customer data, which can lead to increased engagement and conversion rates.
- AI in ecommerce platforms includes chatbots, virtual assistants, personalized product recommendations, and dynamic pricing. For instance, Liu and Liao (2020) suggest that personalized recommendations powered by AI algorithms improve the overall shopping experience by predicting what products consumers may be interested in based on their browsing history, purchase patterns, and preferences. This personalization creates a tailored experience that encourages more frequent purchases and greater customer satisfaction

### 2. 'Optimization of Consumer Engagement with Artificial Intelligence Elements on Electronic Commerce Platforms' (Yushi Jiang& Atlab Hussain-2023)

- Impact of AI on Purchasing Behaviour:
- Purchasing behaviour refers to the decisionmaking process that customers go through before making a purchase. AI has been shown to influence purchasing behaviour by providing customers with relevant, real-time information and personalized experiences. Kumar and Shah (2020) highlight that AI-driven product recommendations significantly impact consumer decisions by influencing the products they choose to explore and buy.
- AI's ability to analyse large datasets and predict consumer preferences allows e-commerce platforms to offer products that are more likely to match the needs and desires of individual customers. Studies by Zhang and Sun (2020) indicate that AI-powered personalization can improve the chances of a sale by guiding consumers toward items that meet their specific

requirements, ultimately increasing the likelihood of purchase. Furthermore, AI tools such as chatbots engage customers in real-time conversations, addressing concerns and guiding them through the purchase journey, which further impacts decision-making processes.

• The impact of AI on purchasing behaviour is also evident in how AI-driven tools improve customer engagement by reducing friction in the buying process. According to Binns (2018), AI simplifies the shopping experience by offering quick responses to customer queries and minimizing the effort required to make purchasing decisions.

### 3. 'The implementation of Artificial Intelligence and Immersive Technology in E-Commerce: The role of consumer engagement as a mediating variable' (Kisti Aliyah & Dien Rizqina – 2024)

- AI and Brand Loyalty:
- Brand loyalty refers to a customer's commitment to a particular brand, often resulting in repeat purchases and positive word-of-mouth recommendations. In the context of ecommerce, AI's role in fostering brand loyalty has gained increasing attention. Huang and Rust (2021) argue that AI can help ecommerce businesses build stronger relationships with customers by offering personalized services and consistent, relevant experiences that increase consumer trust and satisfaction.
- 'AI-driven personalization can make customers feel valued and understood by recommending products that are aligned with their individual tastes. Venkatesh and Bala (2019) explain that when customers see a platform catering specifically to their preferences, they are more likely to develop a sense of loyalty toward that platform. In addition, AI tools like loyalty programs and personalized discounts create a feeling of being rewarded, further reinforcing customers' emotional attachment to the brand.
- Moreover, AI enhances brand loyalty by improving post-purchase engagement through follow-up emails, personalized offers, and recommendations for future purchases. Choudhury and Pandey (2021) emphasize that AI systems can automatically send reminders, suggest complementary products, and provide after-sales support, keeping the customers engaged long after the initial purchase. This ongoing engagement nurtures a stronger relationship between the customer and the

brand, increasing the likelihood of repeat purchases and loyalty.

4. 'Application of artificial intelligence in business management, e-commerce and finance' (Harikumar Pallathadka and Mohd Naved-2021)

## • AI and Customer Engagement:

- Customer engagement is a critical factor in ecommerce success, and AI has emerged as a transformative tool in enhancing this interaction. Studies, such as those by Marr (2019) in "Artificial Intelligence in Practice," emphasize the role of AI technologies like chatbots. virtual assistants, and recommendation engines in creating seamless, personalized experiences. For instance, AIdriven chatbots are available 24/7, providing instant customer service, addressing inquiries, and offering tailored solutions based on previous interactions.
- Similarly, Kietzmann et al. (2018) explore how AI facilitates dynamic communication channels that adapt to customer preferences, resulting in higher satisfaction and loyalty. Research further suggests that real-time engagement tools powered by AI can influence a customer's perception of a brand, as timely responses and accurate recommendations improve the overall user experience. These tools also enhance the customer journey, from browsing to checkout, ensuring consistent engagement throughout the process.

# 5. 'Application of Artificial Intelligence in Electronic Commerce' (Xia Song-2019)

### • AI's Role in Purchasing Behavior-

 AI has significantly influenced consumer purchasing behaviour, transforming how decisions are made on e-commerce platforms. According to Siegel (2016) in "Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die," predictive analytics is one of AI's most impactful applications in understanding and predicting purchasing trends. This technology allows businesses to analyse customer data, such as browsing habits, past purchases, and wish lists, to offer personalized recommendations.

### • AI and Brand Loyalty

• The impact of AI on brand loyalty is another area of significant interest. Pradeep et al. (2018) in "AI for Marketing and Product Innovation" discuss how AI-driven loyalty programs, such as rewards based on personalized purchase milestones, help businesses retain customers. These programs leverage AI to monitor customer interactions and deliver rewards that align with individual preferences, fostering long-term loyalty.

Kingsnorth (2022) provides evidence that AIengagement powered tools. such as personalized email campaigns and push notifications, play a vital role in keeping customers connected to a brand. By offering value-driven communication, AI ensures that brands remain relevant in the minds of their customers. Similarly, Sharma (2021) in "Building Brand Loyalty in the Age of AI" emphasizes that consistent and meaningful interactions facilitated by AI increase emotional attachment to a brand, which is crucial for loyalty.

## **Research Objectives:**

**Objective-1:** To study the role of AI as a modern marketing tool

**Objective-2:** To identify the impact of dynamic pricing, personalized recommendation used by AI on purchasing behaviour of customers.

**Objective-3:** To identify the impact of personalization, reward programs, consistent communication used by AI on enhancing brand loyalty among customers.

### **Research Methodology:**

The research methodology outlined a systematic process that was followed to study the effectiveness of AI in enhancing customer engagement on different e-commerce platforms in Amravati city, with a focus on purchasing behaviour and brand loyalty.

### **Research Design:**

The study employed a descriptive research design to provide insights suitable for understanding the impact of AI on purchasing behaviour and the relationship between AI-driven tools and customer engagement. This design aimed to investigate brand loyalty.

### Sources of Data Collection:

**Primary Data:** Primary data was collected through the Questionnaire Method.

**Secondary Data:** Secondary data was collected from various research papers, books, and newspaper articles.

### **Sampling Design:**

**Sample Universe:** The sampling universe for this research was all the residents of Amravati city.

**Sample Population:** The sampling population for this study consisted of all e-commerce platform users in Amravati city.

**Sample Unit:** The sample unit was the Amazon and Flipkart e-commerce platform users in Amravati city.

**Sample Size:** The study focused on a sample of 30 individuals from Amravati city who used different e-commerce platforms for online purchasing.

### **Sampling Technique:**

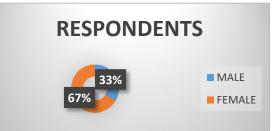
Purposeful Sampling was employed to ensure a representative selection of individuals who met the criteria.

### **Data Analysis and Interpretation:**

This part includes presentation, analysis and interpretation of data which were drawn from the questionnaire. Total respondents were thirty. Analysis is the process of breaking up into its constituents parts of categories according to the specific questions under the statements of problem. Presentation is process of organizing the data into logical, sequential and meaningful categories and Classification to make them amendable to study and interpretation.

### • Analysis of gender wise distribution of respondents: Table No-01: Table showing gender wise distribution of respondents-

| TABLE 01 |             |    |
|----------|-------------|----|
| GENDER   | RESPONDENTS |    |
| MALE     |             | 10 |
| FEMALE   |             | 20 |
| TOTAL    |             | 30 |

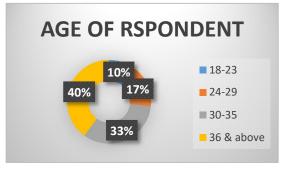


Interpretation: The above data shows that the gender distribution data illustrates that the majority of respondents were female (67%) compared to male respondents (33%). This suggest the higher participation of females in the survey.

# • Analysis of age wise distribution of respondents:

# Table No-02: Table showing age wise distribution of respondents:

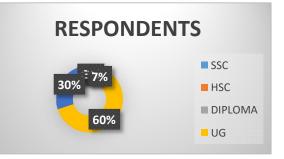
| TABLE 02   |             |  |  |
|------------|-------------|--|--|
| AGE        | RESPONDENTS |  |  |
| 18-23      | 3           |  |  |
| 24-29      | 5           |  |  |
| 30-35      | 10          |  |  |
| 36 & above | 12          |  |  |
| TOTAL      | 30          |  |  |



Interpretation: The data indicates that the vast majority of respondents 40% in total were aged between 36 and above years.

### • Analysis of educational background of the respondents :

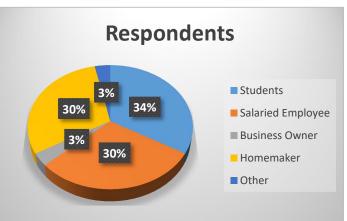
| TABLE 03  |             |  |  |  |
|-----------|-------------|--|--|--|
| EDUCATION | RESPONDENTS |  |  |  |
| SSC       | 0           |  |  |  |
| HSC       | 1           |  |  |  |
| DIPLOMA   | 2           |  |  |  |
| UG        | 18          |  |  |  |
| PG        | 9           |  |  |  |
| TOTAL     | 30          |  |  |  |



Interpretation: The data suggest that 60% of respondents were having bachelor's degree as their educational background.

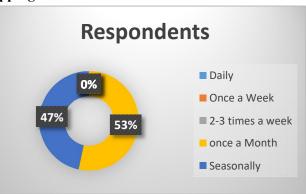
### • Analysis of occupation of the respondents:

| Occupation     | Respondents |
|----------------|-------------|
| Students       | 10          |
| Salaried       |             |
| Employee       | 9           |
| Business Owner | 1           |
| Homemaker      | 9           |
| Other          | 1           |
| TOTAL          | 30          |



# Interpretation: The data suggest that 34% of respondents were Students in this survey. Analysis of frequency of shopping online :

| Frequency    | Respondents |
|--------------|-------------|
| Daily        | 0           |
| Once a Week  | 0           |
| 2-3 times a  |             |
| week         | 0           |
| once a Month | 16          |
| Seasonally   | 14          |
| TOTAL        | 30          |

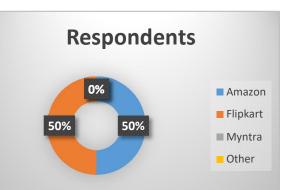


Interpretation: The data suggest that majority of respondent preferred to shop online once a month (53%).

### • Analysis of e-commerce platform used by the respondents the most to shop online :

| Respondents |
|-------------|
| 15          |
| 15          |
| 0           |
| 0           |
| 30          |
|             |

Interpretation: The data suggest that respondents used both e-

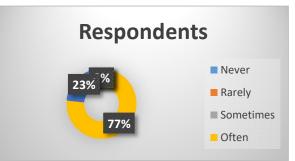


commerce platforms amazon and flipkart equally to shop online (50%)

• Analysis of how often respondents feel that product recommendation were based on their interest while browsing online :

Interpretation: The data suggest that (77%) of total respondent felt that product suggestions were

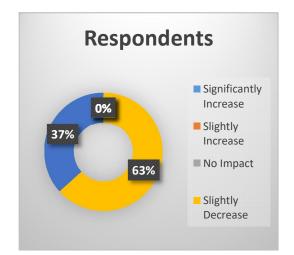
| Frequency | Respondents |
|-----------|-------------|
| Never     | 0           |
| Rarely    | 0           |
| Sometimes | 0           |
| Often     | 23          |
| Always    | 7           |
| TOTAL     | 30          |



tailored on their previous interests and purchases.

• Analysis of how tailored suggestions affected the overall shopping frequency of respondents :

| Frequency         | Respondents |
|-------------------|-------------|
| Significantly     |             |
| Increase          | 0           |
| Slightly Increase | 0           |
| No Impact         | 0           |
| Slightly Decrease | 19          |
| Significantly     |             |
| Decrease          | 11          |
| TOTAL             | 30          |



### **Findings:**

1. The majority of respondents were females (67%)

2. The vast majority of respondents, 40% in total were aged between 36 and above years. Conclusion:

- The survey sample was predominantly of female, suggesting a strong potential women participation and empowerment.
- A significant portion of respondents fell within the 36 and above age range indicating that the survey captured a specific age demographic likely and college or university students.

### **References:**

- Research Papers:
- 1. 'Journey of customers in this digital era: Understanding the role of artificial intelligence technologies in user engagement and conversion' (Gautam Shrivastava & Surajit Bag- 2021)
- 2. 'Optimization of Consumer Engagement with Artificial Intelligence Elements on Electronic Commerce Platforms' (Yushi Jiang& Atlab Hussain-2023)
- 3. 'The implementation of Artificial Intelligence and Immersive Technology in E-Commerce: The role of consumer engagement as a mediating variable' (Kisti Aliyah & Dien Rizqina 2024)
- 4. 'Application of artificial intelligence in business management, e-commerce and finance' (Harikumar Pallathadka and Mohd Naved-2021)
- 5. 'Application of Artificial Intelligence in Electronic Commerce' (Xia Song-2019)

### Newspaper Articles:

- The Economic Times-Taslima Khan, (07-02-2024). 'The maze challenge : how AI is helping ecommerce firms to find the way to customers' home'<u>https://m.economictimes.com/prime/economyand-policy/the-maze-challenge-how-ai-is-helping-e-commerce-firms-find-the-way-to-customershomes</u>
- The Economic Times-Ashok Anand. (29-04-2023) 'Revolutionizing E-commerce: AI-powered CXautomation takes centre stage'. <u>https://m.economictimes.com/small-biz/marketing-branding/marketing/revolutionizing-e-</u> commerce-ai-powered-cx-automation-takes-centre stage/article show/9986

### Book :

1. 'AI for Marketing and Product Innovation' by A. K. Pradeep, Andrew Appel, and Stan Sthanunathan

### QUESTIONAIRRE

### Dear Sir/Madam

I am student of P.R.Pote (Patil) College of Engineering and Management intend to submit the research report as a part of curriculum on the topic "A study of the effectiveness of AI in enhancing customer engagement on different e-commerce platforms in Amravati city" Your co-operation in this academic purpose is earnestly solicited. So, please share your valuable time to fill the Questionnaire.

Minal Ghate 2024-2025

(Please tick ( $\sqrt{}$ ) wherever required)

- 1. Name:
- 2. Mobile No : \_\_\_\_\_
- 3. Gender :
  - Male
  - Female
- 4. Age Group (in years):
  - o 18-23
  - o 24-29
  - o 30-35
  - $\circ$  36 and Above

5. Educational Qualification:

- $\circ$  SSC
- $\circ \, \text{HSC}$
- $\circ$  Diploma
- ∘ UG
- PG
- 6. Occupation:
  - Student
  - $\circ$  Salaried Employee
  - $\circ$  Business Owner
  - $\circ \ Homemaker$ 
    - Other \_\_\_\_\_
- 7. How often do you shop online?
  - Daily
  - Once a week
  - 2-3 times a week
  - $\circ$  Once a month
  - Rarely (during specific season only)
- 8. Which e-commerce platform do you use most often for online shopping?
  - $\circ$  Amazon
  - $\circ$  Flipkart
  - $\circ \ Myntra$
  - Other \_\_\_\_\_

9. When browsing online, how often do you feel that the product suggestions you see are tailored to your previous interests and purchases? (Personalized Recommendation)

| Never               | Rarely                | Sometimes             | Often                | Always                |      |
|---------------------|-----------------------|-----------------------|----------------------|-----------------------|------|
|                     |                       |                       |                      |                       | 1    |
| 10. How have the ta | ailored suggestions y | ou see while shopping | ng affected your ove | rall shopping frequer | icy? |
| Significantly       | Slightly              | No Effect             | Slightly             | Significantly         | 1    |
| Decreased           | Decreased             |                       | Increased            | Increased             | 1    |
|                     |                       |                       |                      |                       |      |

11. When you have questions while shopping online, how helpful do you find the immediate assistance available to you? (Chatbots)

| Not Helpful at<br>All | Slightly Helpful | Moderately<br>Helpful | Very Helpful | Extremely<br>Helpful |
|-----------------------|------------------|-----------------------|--------------|----------------------|
|                       |                  | •                     |              | Â                    |

12. When you have access to quick support while shopping, how does that impact your likelihood of making a purchase?

| Significantly | Slightly  | No effect | Slightly | Significantly |
|---------------|-----------|-----------|----------|---------------|
| Decreases     | Decreases |           | Increase | Increase      |
|               |           |           |          |               |

13. When searching for items, how convenient do you find using voice commands to quickly locate what you need? (Voice Search)

| Not Convenient | Somewhat<br>Convenient | Neutral | Convenient | Very Convenient |
|----------------|------------------------|---------|------------|-----------------|
|                |                        |         |            |                 |

14. How has the convenience of finding products through voice commands affected your shopping frequency?

| Significantly | Slightly  | No Effect | Slightly  | Significantly |
|---------------|-----------|-----------|-----------|---------------|
| Decreased     | Decreased |           | Increased | Increased     |
|               |           |           |           |               |

15. When you upload an image to find similar products, how often do you find the results relevant to what you are looking for? (Image Search)

| Never | Rarely | Sometimes | Often | Always |
|-------|--------|-----------|-------|--------|
|       |        |           |       |        |

16. When you find products by uploading images, how does that experience influence your purchasing decisions?

| Significantly<br>Decreases | Slightly<br>Decreases | No Effect | Slightly Increases | Significantly<br>Increases |
|----------------------------|-----------------------|-----------|--------------------|----------------------------|
|                            |                       |           |                    |                            |

17. When considering a purchase, how much does the ability to visualize how a product would look on you influence your decision? (Virtual Try-On)

| Not at All | Not Much | Neutral | Somewhat | Very Much |
|------------|----------|---------|----------|-----------|
|            |          |         |          |           |

### 18. How has the option to visualize products before buying changed your frequency of purchases?

| Greatly   | Slightly  | No Impact | Slightly  | Significantly |
|-----------|-----------|-----------|-----------|---------------|
| Decreased | Decreased |           | Increased | Increased     |
|           |           |           |           |               |

19. When checking the status of your orders, how satisfied are you with the updates you receive regarding their progress? (Automated Tracking)

| Very Dissatisfied | Dissatisfied | Neutral | Satisfied | Very Satisfied |
|-------------------|--------------|---------|-----------|----------------|
|                   |              |         |           |                |

20. How do the updates you receive about your order status affect your willingness to shop more frequently?

| Significantly<br>Decreases | Slightly<br>Decreases | No Effect | Slightly Increases | Significantly<br>Increases |
|----------------------------|-----------------------|-----------|--------------------|----------------------------|
|                            |                       |           |                    |                            |

21. When waiting for a delivery, how reassuring do you find the notifications you receive about its status? (Delivery Updates)

| Not Assuring | Slightly<br>Reassuring | Neutral | Reassuring | Very Assuring |
|--------------|------------------------|---------|------------|---------------|
|              |                        |         |            |               |

22. How do the updates you receive regarding your delivery status influence your confidence in making additional purchases?

| Significantly<br>Decreases | Slightly Increases | No Change | Slightly Increases | Significantly<br>Increases |
|----------------------------|--------------------|-----------|--------------------|----------------------------|
|                            |                    |           |                    |                            |

23. How often do you come across suggestions for products that seem to match your Interests while shopping?

| interests while si |        |           |       |        |
|--------------------|--------|-----------|-------|--------|
| Never              | Rarely | Sometimes | Often | Always |
|                    |        |           |       |        |

### 24. When you see suggestions that align with your interests, how does that affect your purchasing frequency?

| Greatly<br>Decreases | Slightly<br>Decreases | No Impact | Slightly Increases | Significantly<br>Increases |
|----------------------|-----------------------|-----------|--------------------|----------------------------|
|                      |                       |           |                    |                            |

25. How would you describe your overall shopping experience when you encounter suggestions tailored to you?

| Very Negative | Negative | Neutral | Positive | Very Positive |
|---------------|----------|---------|----------|---------------|
|               |          |         |          |               |

26. When you receive suggestions for products you hadn't considered before, how likely are you to make an impulse purchase?

| Very Unlikely | Unlikely | Neutral | Likely | Very Likely |
|---------------|----------|---------|--------|-------------|
|               |          |         |        |             |

### 27. How often do you feel that the suggestions you see are relevant to your needs?

| Never | Rarely | Sometimes | Often | Always |
|-------|--------|-----------|-------|--------|
|       |        |           |       |        |

### 28. When you see tailored suggestions, how much does that influence your decision to buy a product?

| Not at All | Not Much | Neutral | Somewhat | Very Much |
|------------|----------|---------|----------|-----------|
|            |          |         |          |           |

### 29. How satisfied are you with the suggestions you encounter while shopping?

| Very Dissatisfied | Dissatisfied | Neutral | Satisfied | Very<br>Satisfied |
|-------------------|--------------|---------|-----------|-------------------|
|                   |              |         |           |                   |

30. When you receive suggestions that match your interests, how does it affect your loyalty to a brand?

|           | 00        | ,         | 1                  | 5 5           |
|-----------|-----------|-----------|--------------------|---------------|
| Greatly   | Slightly  | No Impact | Slightly Increases | Significantly |
| Decreases | Decreases |           |                    | Increases     |
|           |           |           |                    |               |

31. When you are browsing online and see limited-time offers, how does that influence your sense of urgency to make a purchase?

| Not Influential | Slightly    | Moderately  | Very        | Extremely   |
|-----------------|-------------|-------------|-------------|-------------|
| At All          | Influential | Influential | Influential | Influential |
|                 |             |             |             |             |

32. While shopping online, when you notice a price change or a special offer, how does that affect how often you decide to make a purchase?

| Greatly<br>Decreases | Slightly<br>Decreases | No Impact | Slightly Increases | Significantly<br>Increases |
|----------------------|-----------------------|-----------|--------------------|----------------------------|
|                      |                       |           |                    |                            |

33. How likely are you to make an unplanned purchase when you come across a time-sensitive promotion while browsing?

| Very Unlikely | Unlikely | Neutral | Likely | Very Likely |
|---------------|----------|---------|--------|-------------|
|               |          |         |        |             |

34. How would you describe your overall experience when shopping online and encountering time-sensitive offers or changing prices?

| Very Negative | Negative | Neutral | Positive | Very Positive |
|---------------|----------|---------|----------|---------------|
|               |          |         |          |               |

35. When you see a product with a limited-time offer while browsing, how willing are you to make a quick decision to buy it?

| Very Unwilling | Unwilling | Neutral | Willing | Very Willing |
|----------------|-----------|---------|---------|--------------|
|                |           |         |         |              |

36. Have you noticed any changes in your online shopping habits due to the presence of time-sensitive pricing offers?

| Not at All | Not Much | Neutral | Somewhat | Very Much |
|------------|----------|---------|----------|-----------|
|            |          |         |          |           |

37. Do you feel that personalized advertisements make you more likely to make a purchase on ecommerce platforms?

| Strongly<br>Disagree | Disagree | Neutral | Agree | Strongly<br>Agree |
|----------------------|----------|---------|-------|-------------------|
|                      |          |         |       |                   |

38. How likely are you to return to an ecommerce platform that offers personalized experiences based on your past behaviour and preferences?

| Very Unlikely | Unlikely | Neutral | Likely | Very Likely |
|---------------|----------|---------|--------|-------------|
|               |          |         |        |             |

39. How much do tailored ads or content that reflect your interests influence your decision to engage with a specific e-commerce platform?

| Not Influential | Slightly    | Moderately  | Very        | Extremely   |
|-----------------|-------------|-------------|-------------|-------------|
| At All          | Influential | Influential | Influential | Influential |
|                 |             |             |             |             |

40. When you see personalized offers or content while browsing, how does that affect your choice to continue shopping with a particular platform?

| Greatly   | Slightly  | No Impact | Slightly Increases | Significantly |
|-----------|-----------|-----------|--------------------|---------------|
| Decreases | Decreases |           |                    | Increases     |
|           |           |           |                    |               |

41. When you receive tailored promotions or content that align with your interests, how does that affect your likelihood of returning to that platform for future purchases?

| Greatly<br>Decreases | Slightly<br>Decreases | No Impact | Slightly Increases | Significantly<br>Increases |
|----------------------|-----------------------|-----------|--------------------|----------------------------|
|                      |                       |           |                    |                            |

42. How often do you pay attention to special offers or programs available on e-commerce platforms when making a purchase?

43. How much do special offers or incentives influence your decision to choose one e-commerce platform over another?

| Not at All<br>Influential | Slightly<br>Influential | Somewhat influential | Very Influential | Extremely<br>Influential |
|---------------------------|-------------------------|----------------------|------------------|--------------------------|
|                           |                         |                      |                  |                          |

44. How do timely updates about new products or promotions affect your likelihood of exploring more items on an online shopping site?

| Extremely<br>Unlikely | Unlikely | Neutral | Likely | Extremely Likely |
|-----------------------|----------|---------|--------|------------------|
|                       |          |         |        |                  |

45. Which aspect of personalization do you value the most while shopping online? (Select all that apply)

□ Product recommendations

□ Personalized offers and discounts

□ Tailored content

Customized communication

□ Personalized customer service

46. When you encounter content or suggestions that resonate with your previous purchases, how does that impact your overall experience with the platform?

| Very Poor | Poor | Neutral | Good | Excellent |
|-----------|------|---------|------|-----------|
|           |      |         |      |           |

47. How does the quality of interactions you have with an online platform, such as receiving helpful responses or relevant information, affect your feelings about that brand?

| Very Unhappy | Unhappy | Neutral | Нарру | Very Happy |
|--------------|---------|---------|-------|------------|
|              |         |         |       |            |

48. When you are given the chance to share your thoughts or experiences with an online platform, how does that influence your connection to that brand?

| Highly Negative | Negative | Neutral | Positive | Highly Positive |
|-----------------|----------|---------|----------|-----------------|
|                 |          |         |          |                 |

49. How does consistent engagement from an online platform, such as regular updates or interactions, shape your perception of their reliability?

| Strongly<br>Disagree | Disagree | Neutral | Agree | Strongly<br>Agree |
|----------------------|----------|---------|-------|-------------------|
|                      |          |         |       |                   |

50. When you reach out with questions or concerns, how does the speed and helpfulness of the responses you receive affect your willingness to shop with that platform again?

| Strongly<br>Unwilling | Unwilling | No Impact | Willing | Strongly<br>Willing |
|-----------------------|-----------|-----------|---------|---------------------|
|                       |           |           |         | 0                   |

51. How do exclusive offers or promotions that you receive influence your decision to continue shopping with a particular online platform?

| Greatly<br>Decreases | Slightly<br>Decreases | No Impact | Slightly Increases | Significantly<br>Increases |
|----------------------|-----------------------|-----------|--------------------|----------------------------|
|                      |                       |           |                    |                            |

52. How important are reward programs in your decision to stay loyal to an e-commerce platform you used?

| Not Important at | Slightly  | Moderately | Very      | Extremely |
|------------------|-----------|------------|-----------|-----------|
| All              | Important | Important  | Important | Important |
|                  |           |            |           |           |

53. Which type of rewards do you prefer provided by e-commerce platform you use? (Select all that apply)

□ Discounts on future purchases

□ Free products or samples

Exclusive access to new products

Loyalty points

□ Personalized gifts

54. How likely are you to recommend the e-commerce platform you use to others based on its reward program?

| Very Unlikely | Unlikely | Neutral | Likely | Very Likely |
|---------------|----------|---------|--------|-------------|
|               |          |         |        |             |

55. How do you feel about your experiences with an online shopping platform when considering aspects like tailored offers, timely updates, and the quality of interactions you've had?

| Very Negative | Negative | Neutral | Positive | Very Positive |
|---------------|----------|---------|----------|---------------|
|               |          |         |          |               |