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# Satisfaction Levels in Using AI Chatbots in E-Commerce among Working Individuals in Dasmariñas, Cavite

**Anjeli Mae L. Tumlos[1], Czarina Beatrice S. Sampilo[2], Dana Paola G. Remulla[3], Lucky Cedrick D. Guyamin[4]**

[1,2,3]Student, College of Business Administration, Lyceum of the Philippines University- Cavite
[4]Adviser, College of Business Administration, Lyceum of the Philippines University- Cavite

**Abstract**
AI chatbots have transformed customer interactions on e-commerce platforms. This quantitative study aimed to assess user satisfaction based on disconfirmation types—commercial, informational, navigational, and transactional—and to examine the relationship between socio-economic profiles and user expectations and experiences. Despite widespread adoption, limited research has focused on working individuals and existing chatbot models. Descriptive and causal research designs were utilized, with survey questionnaires distributed according to respondents' age, sex, civil status, educational attainment, and monthly income. Findings indicated general dissatisfaction with AI chatbots across all search intents, with significant differences observed in certain socio-economic groups. A key challenge identified was the lack of emotional intelligence in chatbot interactions. The results underscore the need for improved chatbot capabilities to better address the diverse needs of working users in e-commerce settings.

**Keywords:** AI chatbots, artificial intelligence, e-commerce, satisfaction levels

## 1. Introduction

With the growing influence of Artificial Intelligence (AI), significant changes have occurred in how individuals interact with technology. AI, defined as the capability of digital systems to simulate human intelligence, has been applied across various sectors, including cybersecurity, transportation, and retail (Valavanidis, 2023). In response, businesses increasingly adopted AI for its efficiency and convenience, particularly through AI chatbots. These chatbots, which function as conversational tools, became prevalent in e-commerce platforms due to their ability to enhance customer service and generate revenue.

The integration of AI chatbots in e-commerce offered substantial benefits by improving communication, increasing productivity, and strengthening customer relationships (Anaya, Braizat, & Al-Ani, 2024). Bhalerao et al. (2022) emphasized that by resolving customer concerns swiftly and accurately, AI chatbots contribute to higher customer satisfaction, making them essential for both small and large enterprises. Moreover, consistent use of chatbots was found to positively influence customer repurchase intentions. In platforms such as Shopee Indonesia, their interactive communication, responsiveness, and user-friendly design were identified as key drivers of enhanced customer service (Saputra & Sutarso, 2023).

According to Luo et. al. (2019), as cited by Zhang et. al. (2021), alongside these benefits, certain disadvantages have emerged. Some individuals have declined the use of AI chatbots as they lean more towards interacting with human representatives, which emphasizes the importance of taking into consideration the diverse customer preferences of different individuals, especially in communications. Based on the study of Folstad & Brandtzaeg (2020), in addition to that, AI chatbots have been experiencing a backlash in processing complex queries as it requires customers to raise them repeatedly, making the conversation a time-consuming experience. Users have reported issues with strange responses and irrelevant interactions upon using the tool, making them feel unsatisfied. Hedonic aspects of e-service quality have also been raised as an issue. In this instance, a user of a Discord bot called MurphyBot felt that the tool has become stagnant and unfulfilling, which made them discontinue the use of the tool.

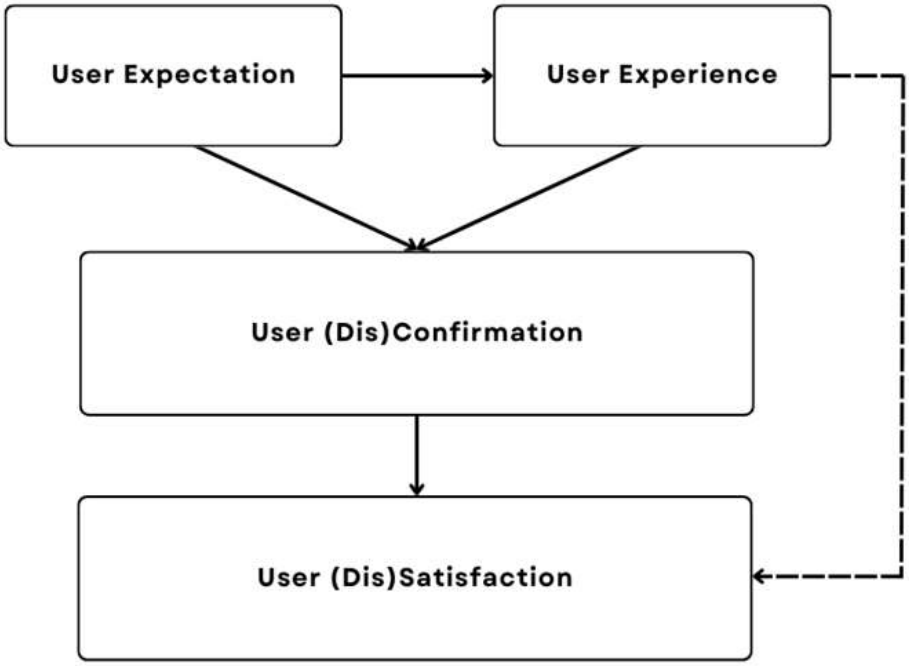
As evidenced by previous studies, specifying a key area to be examined aids in understanding the satisfaction levels brought by the use of AI chatbots as a customer service tool. By ensuring that its features and functionalities are aligned with the needs and expectations of its users, greater customer loyalty fosters. specific background and context (Patel & Trivedi, 2020). Additionally, as recommended by Riegger, Klein, Merfeld, and Henkel (2021), targeting a specific background would help to provide a more solid support in acknowledging complicated key areas and factors to consider in using AI chatbots as a personalized customer service tool. Working with specified antecedents would aid in focusing on certain contexts of AI chatbots in the field of customer service as recommended by Oliver (1980), cited by Dwivedi et al. (2023).

The study explored the level of satisfaction of users of AI chatbots in delivering customer service by evaluating their expectations and experiences across commercial, informational, navigational, and transactional intents. Additionally, the research examined the significant difference of the level of satisfaction with the socio-economic profiles of the respondents, aiming to generate actionable recommendations for optimizing customer service strategies. By assessing the manipulated antecedents and performance of using AI chatbots, this study presented a crucial step in unlocking AI's potential across various sectors, particularly in business, and aimed to gauge user satisfaction to provide valuable insights for effective integration of AI chatbots into organizational operations.

### 1.1.Theoretical Framework

According to Jiang and Klein (2009), cited by Brill (2022), expectation confirmation theory shares a significant role in identifying the level of satisfaction from a user point-of-view. Meeting and exceeding expectations is important towards customer experience, especially in customer service satisfaction. Two main components that this theory focuses on are the antecedent and subsequent perceptions, where antecedent perceptions lean onto the manipulated expectation — which is the prior image of AI chatbots in the minds of the customers, and manipulated experience — which is the subsequent perceptions are their posterior image.

**Figure 1. Expectation-Confirmation Theory**




### 1.2.Conceptual Framework

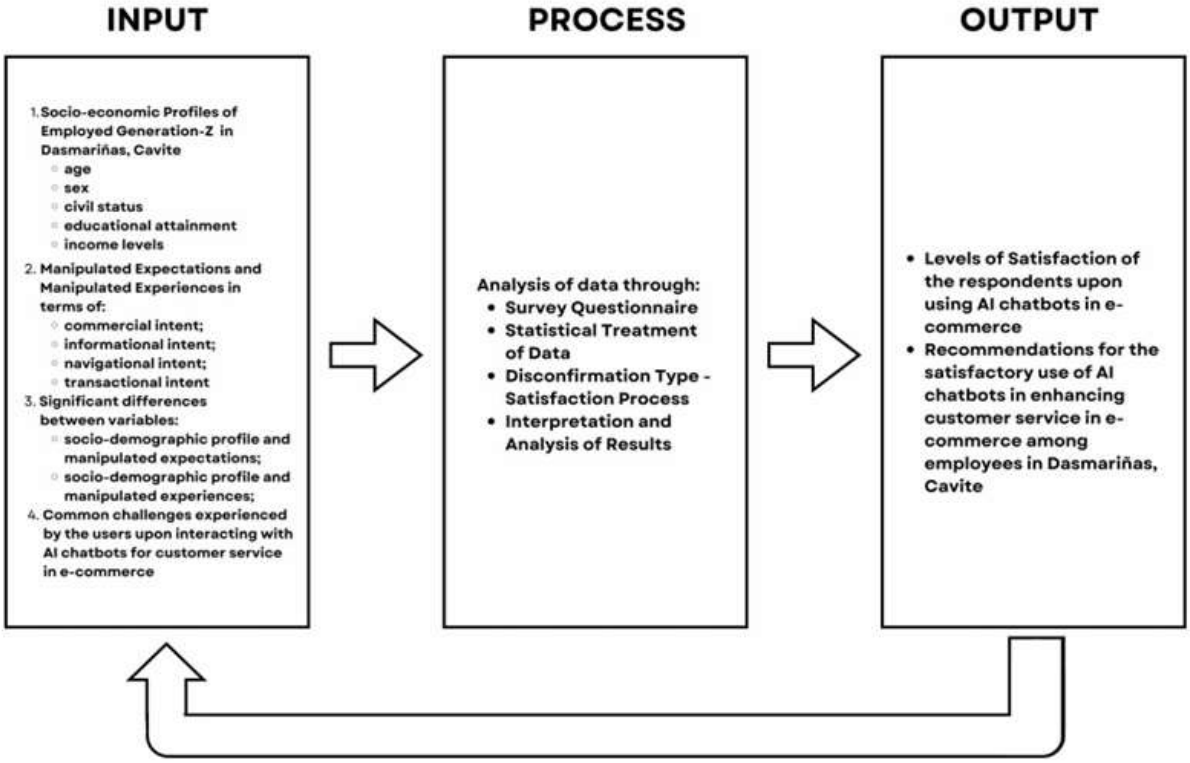
The conceptual framework explains the method used to carry out this research. It structures the problem investigated by clarifying the variable arrangement, and showing their relationships in an orderly manner. This study employs an Input-Process-Output (IPO) Model to facilitate this structured examination.

The study considered the data acquired from the respondents as the input of the study. It aimed to collect the socio-economic profiles of working Generation Z individuals in the area of Dasmariñas, Cavite which includes age, sex, civil status, educational attainment, and income levels. Furthermore, the research acquired the manipulated expectations and manipulated experiences of customers in terms of commercial intent, informational intent, navigational intent, and transactional intent. The study also looked into the significant differences between socio-economic profiles and manipulated expectations, as well as the significant differences between socio-economic profiles and manipulated experiences. Additionally, it gathered the common challenges experienced by the users upon interacting with AI chatbots for customer service in e-commerce.

During the process phase, data analysis began with the formulation of a survey questionnaire to collect the necessary information from respondents. The collected data were then organized into tables and analyzed using statistical methods to ensure accurate interpretation. This approach enabled an in-depth examination of the variables and their interrelationships.

The study contributed by recommending effective use of AI chatbots to enhance customer service in e-commerce. Based on statistical findings and common user challenges, it proposed strategies for improving customer service practices through AI chatbot integration to strengthen customer relationships.

**Figure 2. Conceptual Framework of the Study**




### 1.3.Statement of the Problem

The study aims to assess the level of satisfaction of the respondents upon using AI chatbots as customer service in e-commerce.

Specifically, this study seeks to answer the questions:

1.3.1. What is the socio-economic profile of the respondents in terms of:

1.3.1.1. age;

1.3.1.2. sex;

1.3.1.3. civil status;

1.3.1.4. educational attainment; and

1.3.1.5. income levels?

1.3.2. What is the level of satisfaction of the respondents derived from the resulting disconfirmation type in terms of the following manipulated variables:

1.3.2.1. commercial intent;

1.3.2.2. informational intent;

1.3.2.3. navigational intent; and

1.3.2.4. transactional intent?

1.3.3. Is there a significant difference between the socio-economic profile and the user expectation and user experience of the respondents upon interacting with AI chatbots for customer service in e-commerce in terms of commercial intent, informational intent, navigational intent, and transactional intent?

1.3.4. What are the most common challenges experienced by the users upon interacting with AI chatbots for customer service in e-commerce?

### 1.4.Hypothesis

The hypothesis has been formulated to guide the study and support the testing process:

H0: There is no significant difference in the socio-economic profile and the user expectation and user experience of the respondents upon interacting with AI chatbots for customer service in e-commerce in terms of commercial intent, informational intent, navigational intent, and transactional intent.

### 1.5.Scope and Limitation of the Study

This study examined the satisfaction levels of AI chatbot use in e-commerce among working Generation Z individuals in Dasmariñas, Cavite. Participants were employed residents aged 18 to 27, legally recognized as adults. The research focused on four types of user intents—commercial, informational, navigational, and transactional—and was limited to AI chatbot interactions in online customer service, specifically on e-commerce platforms such as Shopee and Lazada.

This study mainly focused on Generation Z individuals, which means the findings were not applicable to other age groups or socio-economic populations. Consequently, individuals who did not meet the age requirement or who were not currently employed were excluded from participation. Additionally, working individuals or those who are generating income outside Dasmariñas, Cavite, were not included in the study. This study focused on specific variables—user intents categorized under manipulated expectations and experiences—to streamline data collection and analysis of customer service satisfaction. It excluded unrelated variables from previous studies and did not consider customer service involving human agents. Additionally, satisfaction with AI chatbots was not assessed on entertainment or lifestyle platforms such as Facebook and Instagram. The research was conducted between August 2024 and May 2025, establishing clear boundaries for data collection and analysis. Disconfirmation types and satisfaction levels were not measured quantitatively but were inferred from respondents' expectations and experiences based on the Expectation-Confirmation Theory.

## 2. Methodology

In this study, descriptive and causal research design were used. According to Siedlecki (2020), descriptive research design is a helpful method designed to describe the subject or the focus of the research being studied as it answers the questions of what, when, where, and how. In addition, causal research design, wherein the independent variables were manipulated and measured the dependent variable and understand or establish a cause and effect, were also used in this study (Singh, 2020). Correspondingly, the study focused on working Generation Z individuals aged 18 to 27 because according to Statista (2024), 50.2% of this age group surpass the usage rates of Millennials and Baby Boomers, which ranged around 39.75%. Bunea et al. (2024) also noted that Generation Z is characterized by strong digital proficiency and frequent online shopping, making them a key consumer group familiar with chatbot technology. Only legally employed individuals were included, as they possess the income and purchasing power relevant to e-commerce behavior. Due to the limited population of working Generation Z individuals in Dasmariñas City, Cavite, the study targeted a minimum of 300 respondents, as recommended by the research panel during the proposal defense. This sample size aligned with Masa's (2021) G*Power analysis using version 3.1.9.7, which calculated a required sample of 252 respondents based on a 0.25 effect size and a 0.05 margin of error. Ultimately, 301 qualified respondents were included, achieving a statistical power of 0.9781. The study was conducted in Dasmariñas, Cavite, regarded as "The Industrial Giant of CALABARZON" (Mance, 2021). Moreover, Dasmariñas City is also known as the "University Capital of Cavite," which hosts several major educational and health institutions (San Jorjo, 2024). The study was

conducted from August 2024 to May 2025, with data gathering primarily occurring between March and April 2025. Literature, journals, and similar research were used as a basis in formulating this study's questionnaire. The research questionnaire underwent expert validation by two industry professionals and one psychometrician to ensure its relevance, clarity, and appropriateness. Mr. Christian E. Matriano, MBA, who holds a Bachelor's Degree in Business Administration major in Financial Management and a Master in Business Administration, and currently serves as a part-time professor at Lyceum of the Philippines University – Cavite. Next, Mr. Anthony I. Samac, MBA, who holds a Bachelor's Degree in Economics, a Master's Degree in Economics and Business Administration, and is currently pursuing his Ph.D. while serving as a full-time professor at Lyceum of the Philippines University – Cavite. In addition, Mr. Joshua Cadayona, RPm, a registered psychometrician with a bachelor's degree in Psychology and a Master of Arts in Clinical Psychology, provided professional input to ensure the psychological soundness and measurement validity of the instrument.

To ensure the research results were both accurate and clearly presented, the researchers used several statistical tools to sort and study the data. Descriptive statistics, such as frequency and percentage distribution, were used to present the results for problem 1, 2, and 4 to summarize the respondents' socio-economic profile and survey answers. The weighted mean was also used in presenting the results for problem 1, 2, and 4 to analyze the socio-economic profile according to their age and income levels and answers of the respondents on the survey questionnaire of the study. It was also used to determine the mean satisfaction scores for different chatbot intents. The standard deviation was applied to gain the results for problem 1, 2, and 4 to assess the variability in respondents' expectations and experiences regarding AI chatbot usage on e-commerce platforms, specifically across four chatbot intents. To identify if there is a significant difference between two independent groups, a two-way t-test was used to present the results for problem 3, which pinpoints any real differences between two groups, such as the respondents' sex and civil status. Finally, the results of problem 3 were also presented using a one-way ANOVA to reveal whether income, education, and other socio-economic factors truly shape how satisfied people are with AI chatbots.

## 3. Results and Discussion

**Table 1. Socio-economic Profile of the Respondents**

| Profile | Category | Frequency n = 301 | Percentage (%) | Rank |
|---|---|---|---|---|
| **Age** | 18-20<br>21-23<br>24-26<br>27-28 | 56<br>106<br>102<br>40 | 19<br>35<br>34<br>12 | 3<br>1<br>2<br>4 |
| **Sex** | Male<br>Female | 113<br>188 | 38<br>62 | 2<br>1 |
| **Civil Status** | Single<br>Married<br>Widowed<br>Separated | 286<br>15<br>0<br>0 | 95<br>5<br>0<br>0 | 1<br>2<br>3<br>4 |

| | | | | |
|---|---|---|---|---|
| **Educational Attainment** | Highschool Graduate | 16 | 5 | 3 |
| | Vocational Graduate | 4 | 1 | 4 |
| | College Undergraduate | 127 | 42 | 2 |
| | College Graduate | 154 | 52 | 1 |
| | Postgraduate/Graduate Studies | 0 | 0 | 5 |
| **Monthly Income** | Below 10,957 | 106 | 35 | 1 |
| | 10,957 - 21,914 | 93 | 31 | 2 |
| | 21,914 - 43,828 | 72 | 24 | 3 |
| | 43,828 - 76,669 | 27 | 9 | 4 |
| | 76,669 - 131,484 | 3 | 1 | 5 |
| | 131,484 - 219,140 | 0 | 0 | 6 |

Age. Table 1 illustrates that among all legal age Gen Zs, ages twenty-one to twenty-three (21-23) had the highest percentage of respondents at thirty-five (35) percent and a frequency of one hundred six (106). This highlights that many individuals are employed to lessen financial burdens, may they be studying, a scholar, or not as concluded by Lopio (2022).

Sex. Table 1 illustrates that out of the 301 individuals, one hundred thirteen (113) and one hundred eighty-eight (188) were male and female respectively, with women forming 62.5 percent of the sample, which indicates that female respondents are more proficient in the use of shopping applications like Shopee and Lazada that have AI chatbots. Interestingly, this is not consistent with Mogelvang et al. (2024) who reported that male students used AI chatbots more often than their female counterparts who used them mostly for low-level tasks. It indicates that some differences regarding the use of chatbots among the sexes may be contextualized in terms of business and education.

Civil Status. illustrates that as highlighted in the data, ninety-five percent (95%) of the respondents were single, while merely five percent (5%) were married with no indication of widowed or separated individuals. This marks a trend among Gen Z (18-28) to postpone marriage to focus on personal development, career, and financial objectives. Rosyada, Hadi, and Sundari (2023) remarked that a good number of Gen Z individuals focus on independence rather than readiness to deal with the emotional aspects of marriage. Subsequently, single users are more disposed to and therefore likely to utilize AI devices such as chatbots for the purposes of decision-making. The findings of Guardian (2025) stated that single individuals actively engaging with AI tools tend to utilize them for the management of daily tasks.

Educational Attainment. Table 1 showed that the respondents of the study are mainly college graduates, which accounts for a total of 154 respondents or 51.2 percent. The remaining percentage accounts for 16 high school graduates, 4 vocational graduates, and 127 college undergraduates, and none for postgraduate/graduate studies. This is congruent to the study of Morsi (2023), that 65 percent of the people using AI chatbot in e-commerce platforms have already obtained bachelor's degree, meaning they are college graduates.

Monthly Income. Table 1 showed that most of the respondents had a monthly income of below ₱10,957 with 106 respondents (35.2%), followed closely by individuals earning between ₱10,957 and ₱21,914 with 93 responses (30.9%). Other than that, a small portion of the sample fell into the mid-income bracket of ₱21,914 to ₱43,828 (23.9%), while the rest earned above ₱43,828 (10.0%). This suggests that most of the respondents belong to the lower-to-lower middle-income segments. This is in contrast to the study

conducted by Kennedy et al. (2023), that those individuals with higher income or those belonging to the upper class use AI chatbots the most because they are more aware of its uses.

**Table 2. User Expectations Using AI Chatbots in terms of Commercial Intent**

| Indicators | Mean | SD | VI |
|---|---|---|---|
| I expect an AI chatbot to provide the best offers and discounts. | 2.90 | 0.784 | High Expectation |
| I expect an AI chatbot to help find trustworthy reviews and ratings | 3.13 | 0.699 | Very High Expectation |
| I expect an AI chatbot to suggest alternative products if my desired item is unavailable. | 3.48 | 0.592 | Very High Expectation |
| I expect an AI chatbot to recommend complementary products with relevant specifications. | 3.32 | 0.626 | Very High Expectation |
| I expect an AI chatbot to provide a list of different brands offering the product I'm looking for. | 3.40 | 0.612 | Very High Expectation |
| **Grand Mean** | 3.246 | 0.6626 | Very High Expectation |

Legend: 4.00–3.00 = Very High expectation, 2.99–2.00 = High Expectation, 1.99–1.01 = Low Expectation, 1.00–0.99 = Very Low Expectation

Table 2 illustrates the expectation of the respondents with AI chatbots in terms of commercial intent on e-commerce platforms. The results showed that the respondents had a Very High Expectation with the statement "I expect an AI chatbot to suggest alternative products if my desired item is unavailable," with the highest mean of 3.48 and standard deviation of 0.592. Whereas, the statement, "I expect an AI chatbot to provide the best offers and discounts" received High Expectation from the respondents yet had the lowest mean of 2.90 and a standard deviation of 0.784. Overall, the results revealed that respondents had Very High Expectation with user expectation in commercial intent, shown in its grand mean of 3.246 and a standard deviation of 0.6626. This result aligns with the study of Guo et al. (2021) which reveals that customers are open to alternative suggestions despite product unavailability which improves the conversion rate by twelve percent, and is seen to further enhance the overall satisfaction and experience of the users.

**Table 3. User Expectations Using AI Chatbots in terms of Informational Intent**

| Indicators | Mean | SD | VI |
|---|---|---|---|
| I expect the AI chatbot to provide accurate information about product availability. | 3.43 | 0.647 | Very High Expectation |
| I expect the AI chatbot to give useful and relevant shipping details. | 3.42 | 0.672 | Very High Expectation |
| I expect the AI chatbot to provide guidance on complex product features. | 3.43 | 0.652 | Very High Expectation |
| I expect the AI chatbot to ensure the information provided is accurate and up-to-date. | 3.52 | 0.661 | Very High Expectation |
| I expect the AI chatbot to assist in providing store-specific information. | 3.46 | 0.689 | Very High Expectation |

| | | | |
|---|---|---|---|
| **Grand Mean** | 3.452 | 0.6642 | Very High Expectation |

Legend: 4.00–3.00 = Very High expectation, 2.99–2.00 = High Expectation, 1.99–1.01 = Low Expectation, 1.00–0.99 = Very Low Expectation

Table 3 illustrates that respondents had a Very High Expectation with the statement "I expect the AI chatbot to ensure the information provided is accurate and up-to-date," with the highest mean of 3.52 and a standard deviation of 0.661. Despite having the lowest mean, the statement "I expect the AI chatbot to give useful and relevant shipping details" reflected a Very High Expectation from the respondents with a mean of 3.42 and a standard deviation of 0.672. Overall, it is revealed that user expectation in informational intent showed a Very High Expectation by the respondents. The result agrees with the study of Alagarsamy and Mehrolia (2023) as when the AI chatbot is perceived to be competent, users are more likely to indulge in trusting them, leading to greater engagement.

**Table 4. User Expectations Using AI Chatbots in terms of Navigational Intent**

| Indicators | Mean | SD | VI |
|---|---|---|---|
| I expect AI chatbots to help me find specific items quickly. | 3.60 | 0.611 | Very High Expectation |
| I expect AI chatbots to be more helpful than browsing manually. | 3.63 | 0.589 | Very High Expectation |
| I expect AI chatbots to assist in navigating to specific sections of an e-commerce site. | 3.41 | 0.665 | Very High Expectation |
| I expect AI chatbots to help me locate discounted items. | 2.95 | 0.878 | High Expectation |
| I expect AI chatbot navigation tools to be easy to use. | 3.31 | 0.679 | Very High Expectation |
| **Grand Mean** | 3.38 | 0.6844 | Very High Expectation |

Legend: 4.00–3.00 = Very High expectation, 2.99–2.00 = High Expectation, 1.99–1.01 = Low Expectation, 1.00–0.99 = Very Low Expectation

Table 4 illustrates that respondents had a Very High Expectation with the statement "I expect AI chatbots to be more helpful than browsing manually," revealing the highest mean of 3.63 and a standard deviation of 0.665. On the other hand, the statement "I expect AI chatbots to help me locate discounted items" showed a Very High Expectation despite having the lowest mean of 2.95 and a standard deviation of 0.878. Overall, user expectation in navigational intent revealed a Very High Expectation by the respondents with a grand mean of 3.38 and a standard deviation of 0.6844. This suggests that the assistance of AI chatbots drives user satisfaction. A study by Ruan & Mezei (2022) agrees with this as it found out that AI chatbots effectively streamline tracing information which is more helpful than manual browsing of human frontline employees (HFLEs), specifically in functional product attributes.

**Table 5. User Expectations Using AI Chatbots in terms of Transactional Intent**

| Indicators | Mean | SD | VI |
|---|---|---|---|
| I expect an AI chatbot to assist with placing orders efficiently. | 3.24 | 0.659 | Very High Expectation |
| I expect an AI chatbot to handle payment errors promptly. | 3.12 | 0.714 | Very High Expectation |
| I expect an AI chatbot to process my payment securely. | 2.87 | 0.892 | High Expectation |
| I expect an AI chatbot to facilitate easy application of | 3.34 | 0.734 | Very High Expectation |

| | | | |
|---|---|---|---|
| vouchers during checkout. | | | |
| I expect an AI chatbot to assist in processing cancellations or returns. | 3.29 | 0.737 | Very High Expectation |
| **Grand Mean** | 3.172 | 0.7472 | Very High Expectation |

Legend: 4.00–3.00 = Very High expectation, 2.99–2.00 = High Expectation, 1.99–1.01 = Low Expectation, 1.00–0.99 = Very Low Expectation

Table 5 presents the lowest mean score of 2.87 with the statement, "I expect an AI chatbot to process my payment securely." Meanwhile, the highest mean score was 3.34 with the statement, "I expect an AI chatbot to facilitate easy application of vouchers during checkout." The respondents highly expect chatbots to perform certain transactional tasks, having a grand mean of 3.172. Consistent with Jyothsna et al. (2024), respondents did not rate lower than 3.0 on any expectation in transactions. Payment processing, on the contrary, aligns with Marjerison et al. (2025) where there are numerous trust issues and perceived risks which do not allow users to depend on chatbots for sensitive monetary tasks.

**Table 6. User Experience Using AI Chatbots in terms of Commercial Intent**

| Indicators | Mean | SD | VI |
|---|---|---|---|
| I experienced AI chatbots providing the best offers and discounts. | 2.80 | 0.834 | Good |
| I experienced AI chatbots helping me find trustworthy product reviews. | 3.11 | 0.573 | Very Good |
| I experienced AI chatbots suggesting alternative products when my desired item was unavailable. | 3.43 | 0.632 | Very Good |
| I experienced AI chatbots recommending complementary products with relevant specifications. | 3.15 | 0.659 | Very Good |
| I experienced AI chatbots providing a list of different brands offering my desired product. | 3.21 | 0.649 | Very Good |
| **Grand Mean** | 3.14 | 0.6694 | Very Good |

Legend: 4.00–3.00 = Very Good, 2.99–2.00 = Good, 1.99–1.01 = Poor, 1.00–0.99 = Very Poor

Table 6 illustrates the experience of the respondents with AI chatbots in terms of their commercial intent. The lowest mean score was 2.80 with the statement, "I experienced AI chatbots providing the best offers and discounts." Meanwhile, the highest mean score was 3.43 with the statement, "I experienced AI chatbots suggesting alternative products when my desired item was unavailable." With an overall mean score of 3.14, it can be inferred that most users reported favorable experiences with chatbots assisting them in shopping-related decisions. This supports the findings of Xiang et al. (2024) that AI tools are useful in recommending alternatives when items are out of stock.

**Table 7. User Experience Using AI Chatbots in terms of Informational Intent**

| Indicators | Mean | SD | VI |
|---|---|---|---|
| I experienced the AI chatbot providing accurate product availability information. | 3.23 | 0.639 | Very Good |
| I experienced the AI chatbot giving useful and relevant | 3.48 | 0.671 | Very Good |

| | | | |
|---|---|---|---|
| shipping details. | | | |
| I experienced the AI chatbot providing guidance on complex product features. | 3.42 | 0.641 | Very Good |
| I experienced the AI chatbot ensuring that information provided was accurate and up-to-date. | 3.23 | 0.718 | Very Good |
| I experienced the AI chatbot assisting in providing store-specific information. | 3.24 | 0.695 | Very Good |
| **Grand Mean** | 3.32 | 0.6728 | Very Good |

Legend: 4.00–3.00 = Very Good, 2.99–2.00 = Good, 1.99–1.01 = Poor, 1.00–0.99 = Very Poor

Table 7 outlines where the lowest mean score was 3.23 with the statement "I experienced the AI chatbot ensuring that information provided was accurate and up-to-date." Meanwhile, the highest mean score was 3.48 with the statement, "I experienced the AI chatbot giving useful and relevant shipping details." The grand mean was 3.32, which shows that users find chatbots helpful to some degree. This aligns with the study of Steve & Brightwood (2024), saying that real-time updates mitigate uncertainty and thus improves satisfaction. Zhang & Wang (2024) remarked that clear communication improves the user experience, whereas Smith & Johnson (2024) warned that outdated responses from the chatbot leads to loss of trust, hence the lower ratings on these features.

**Table 8. User Experience Using AI Chatbots in terms of Navigational Intent**

| **Indicators** | **Mean** | **SD** | **VI** |
|---|---|---|---|
| I experienced AI chatbots helping me find specific items quickly. | 3.55 | 0.602 | Very Good |
| I experienced AI chatbots being more helpful than browsing manually. | 3.52 | 0.635 | Very Good |
| I experienced AI chatbots assisting in navigating specific sections of an e-commerce site. | 3.28 | 0.669 | Very Good |
| I experienced AI chatbots helping me locate discounted items. | 2.84 | 0.825 | Good |
| I experienced AI chatbot navigation tools being easy to use. | 3.22 | 0.669 | Very Good |
| **Grand Mean** | 3.282 | 0.68 | Very Good |

Legend: 4.00–3.00 = Very Good, 2.99–2.00 = Good, 1.99–1.01 = Poor, 1.00–0.99 = Very Poor

Table 8 illustrated the experience of the respondents with AI chatbots regarding navigational intent in e-commerce platforms. The statement "I experienced AI chatbots helping me find specific items quickly." got the highest mean score of 3.55 and is interpreted as Very Good. On the other hand, the statement "I experienced AI chatbots helping me locate discounted items." got the lowest mean score of 2.84 with a verbal interpretation (VI) of Good. Overall, the data showed a grand mean of 3.282 and a standard deviation (SD) of 0.68, which indicates a verbal interpretation (VI) of Very Good. This means that the respondents generally had a positive experience using AI chatbots in helping them navigate e-commerce platforms, particularly in finding specific items quickly. According to Fu et al. (2023), whenever AI chatbots help customers to search for and find products quickly in e-commerce platforms, it leads to increased user satisfaction.

**Table 9. User Experience Using AI Chatbots in terms of Transactional Intent**

| Indicators | Mean | SD | VI |
|---|---|---|---|
| I experienced an AI chatbot assisting me efficiently in placing orders. | 3.11 | 0.626 | Very Good |
| I experienced an AI chatbot handling payment errors promptly. | 2.94 | 0.676 | Good |
| I experienced an AI chatbot securely processing my payment. | 2.96 | 0.776 | Good |
| I experienced an AI chatbot facilitating easy application of vouchers during checkout. | 3.29 | 0.747 | Very Good |
| I experienced an AI chatbot assisting in processing cancellations or returns. | 3.18 | 0.759 | Very Good |
| **Grand Mean** | 3.096 | 0.7168 | Very Good |

Legend: 4.00–3.00 = Very Good, 2.99–2.00 = Good, 1.99–1.01 = Poor, 1.00–0.99 = Very Poor

Table 9 showed user experience with AI chatbots regarding transactional intent in e-commerce platforms. The statement "I experienced an AI chatbot facilitating easy application of vouchers during checkout." got the highest mean score of 3.29 and is interpreted as Very Good. Whereas, the statement "I experienced an AI chatbot handling payment errors promptly." got the lowest mean score of 2.94, which indicates a verbal interpretation of Good. Overall, the data showed a grand mean of 3.096 and a standard deviation (SD) of 0.7168, which indicates a verbal interpretation (VI) of Very Good. This means that the respondents generally had positive experiences when using AI chatbots for transactional purposes on e-commerce platforms. Based on the study conducted by Ok (2025), as customers experience AI chatbots helping them in processing transactions in e-commerce platforms, it improves customer satisfaction, which enhances brand loyalty and repeat purchases.

**Table 10. Issues and Challenges in Using AI Chatbot in terms of Potential for Over-Automation**

| Indicators | Mean | SD | VI |
|---|---|---|---|
| When the AI chatbot is the one providing a solution to the problem, it does not give me the choice to speak with a person whenever the situation reaches that point. | 3.08 | 0.868 | Highly Encountered |
| Over-reliance on AI chatbot leaves me feeling like I'm not receiving the full attention I need for my concerns. | 3.04 | 0.861 | Highly Encountered |
| The communicating experience is dull and dry as only AI is there to assist and reach out to me, something a person could easily solve by interacting with me. | 2.87 | 0.814 | Encountered |
| AI chatbot appears to be more robotic and less personalized. | 2.95 | 0.889 | Encountered |
| The AI chatbot sometimes makes me feel disconnected from the brand due to the lack of human touch. | 2.83 | 0.810 | Encountered |
| **Grand Mean** | 2.954 | 0.8484 | Encountered |

Legend: 4.00–3.00 = Highly Encountered, 2.99–2.00 = Encountered, 1.99–1.01 = Lowly Encountered, 1.00–0.99 = Not Encountered

Table 10 illustrates the issues and challenges of using AI chatbots on e-commerce platforms in terms of potential for over-automation. The table showed that respondents highly encounter the situation of "When the AI chatbot is the one providing a solution to the problem, it does not give me the choice to speak with a person whenever the situation reaches that point," with the highest mean of 3.08 and a standard deviation of 0.868. On the other hand, the statement "The AI chatbot sometimes makes me feel disconnected from the brand due to the lack of human touch" revealed to have the lowest mean of 2.83 and a standard deviation of 0.810. Overall, potential for over-automation was revealed to have been encountered by the respondents with its grand mean of 2.954 and a standard deviation of 0.8484. This result is supported by the study of Vassilakopoulou & Pappas (2023) as they've concluded that enhancing seamless transition and effective coordination with a human agent is essential to prevent further dissatisfaction from the users.

**Table 11. Issues and Challenges in Using AI Chatbot in terms of Limited Understanding of Complex Queries**

| Indicators | Mean | SD | VI |
|---|---|---|---|
| It gives generic answers where it does not go into any specifics – which I am more interested in. | 2.83 | 0.761 | Encountered |
| I need to rephrase my questions because an AI chatbot cannot handle the complexity of my requests. | 2.52 | 0.794 | Encountered |
| AI chatbots sometimes struggle to interpret queries using multiple languages. | 2.49 | 0.790 | Encountered |
| AI chatbot provides irrelevant answers when my query is not straightforward. | 2.72 | 0.735 | Encountered |
| The AI chatbot failed to understand technical terms, jargons, or slang, leading to unanswered queries. | 2.22 | 0.956 | Encountered |
| **Grand Mean** | 2.556 | 0.8072 | Encountered |

Legend: 4.00–3.00 = Highly Encountered, 2.99–2.00 = Encountered, 1.99–1.01 = Lowly Encountered, 1.00–0.99 = Not Encountered

Table 11 emphasizes the concern regarding AI chatbots struggling with the complex questions posed by the respondents. The primary concern was, "It gives generic answers where it does not go into any specifics – which I am more interested in.", with a mean score of 2.83, while the least concern was, "The AI chatbot failed to understand technical terms, jargons, or slang, leading to unanswered queries.", with a mean score of 2.22. The low grand mean of 2.556 shows that users encountered struggles with complex or multiple queries. These findings align with the study of Sun et al. (2024), which proved that GPT models may identify slang, but they rarely grasp its full meaning. Jadhav and Joglekar (2024) claimed that chatbots fail to understand contextualized lesser-known abbreviations. Labadze et al. (2023) noted that layered queries tend to confuse AI chatbots. Bodonhelyi et al. (2024) claimed that AI chatbots often presume informal inputs are vague and overly general. These studies highlight that limited understanding of advanced input hinders chatbot acceptance.

**Table 12. Issues and Challenges in Using AI Chatbot in terms of Lack of Emotional Intelligence**

| Indicators | Mean | SD | VI |
|---|---|---|---|
| AI chatbot responses are too formal and overly scripted. | 2.95 | 0.722 | Encountered |

| | | | |
|---|---|---|---|
| AI chatbot lacks human element which decreases trust and rapport. | 2.96 | 0.805 | Encountered |
| AI chatbot makes me feel ignored or misunderstood because it cannot respond empathetically to my concerns. | 2.77 | 0.787 | Encountered |
| AI chatbot does not adjust its tone to match the urgency of my query. | 2.92 | 0.813 | Encountered |
| AI chatbot fails to recognize my frustration when I cannot have the answers that I expected. | 3.08 | 0.847 | Highly Encountered |
| **Grand Mean** | 2.936 | 0.7948 | Encountered |

Legend: 4.00–3.00 = Highly Encountered, 2.99–2.00 = Encountered, 1.99–1.01 = Lowly Encountered, 1.00–0.99 = Not Encountered

Table 12 illustrated the issues and challenges users face when using AI chatbots, especially when it comes to its emotional intelligence. With a mean score of 2.77 and standard deviation of 0.787, the statement "AI chatbot makes me feel ignored or misunderstood because it cannot respond empathetically to my concerns." got the lowest score. On the other hand, the statement "AI chatbot fails to recognize my frustration when I cannot have the answers that I expected." got the highest mean score of 3.08 and standard deviation of 0.847. Overall, the grand mean of 2.936 and standard deviation of 0.7948 means that most respondents encountered that AI chatbots don't understand or respond to emotions. This explains that while chatbots may help people with search intents, they still lack the human emotions that some users want, especially when they are frustrated. According to Zhu et al. (2023), AI chatbots struggle with service problems because they lack empathy, but this can be improved by giving concrete responses that make customers feel more satisfied.

**Table 13. Issues and Challenges in Using AI Chatbot in terms of Inability to Handle Unpredictable Situations**

| Indicators | Mean | SD | VI |
|---|---|---|---|
| AI chatbot gives incorrect responses when I ask a question that is not within its programmed scope. | 2.86 | 0.760 | Encountered |
| AI chatbot cannot provide a solution when it is not listed in the typical frequently asked questions (FAQs). | 2.83 | 0.784 | Encountered |
| The AI chatbot was inaccessible because of a system outage. | 2.37 | 0.973 | Encountered |
| AI chatbot's replies to off-topic questions are always incoherent or irrelevant. | 2.44 | 0.787 | Encountered |
| AI chatbot cannot recognize new topics or tones and gives different vague or off-target responses. | 2.82 | 0.796 | Encountered |
| **Grand Mean** | 2.664 | 0.82 | Encountered |

Legend: 4.00–3.00 = Highly Encountered, 2.99–2.00 = Encountered, 1.99–1.01 = Lowly Encountered, 1.00–0.99 = Not Encountered

Table 13 showed the issues and challenges that users face when AI chatbots are unable to handle unpredictable situations. All of the statements are interpreted as encountered. However, the statement "The AI chatbot was inaccessible because of a system outage." got the lowest mean score of 2.37, while the

statement "AI chatbot often gives incorrect responses when I ask a question that is not within its programmed scope." got the highest mean of 2.86. The grand mean of 2.664 and standard deviation of 0.82 means that users encountered issues regarding unpredictable situations, especially when chatbots face questions that they are not programmed to answer. This is in accordance with the study of Ranieri et al. (2024), where they found out that AI chatbots provide inaccurate responses as it is only programmed to respond according to certain information from the business intelligence of the company, creating confusion among customers.

**Table 14. Equivalent Satisfaction Level Results of Disconfirmation**

| Variable | User Expectation Grand Mean | User Experience Grand Mean | Difference (Experience - Expectation) | Disconfirmation Type | Satisfaction Level |
|---|---|---|---|---|---|
| Commercial Intent | 3.246 | 3.14 | -0.106 | Negative Disconfirmation | Dissatisfied |
| Informational Intent | 3.452 | 3.32 | -0.132 | Negative Disconfirmation | Dissatisfied |
| Navigational Intent | 3.38 | 3.282 | -0.098 | Negative Disconfirmation | Dissatisfied |
| Transactional Intent | 3.172 | 3.096 | -0.076 | Negative Disconfirmation | Dissatisfied |

Legend: Experience > Expectation is Positive Confirmation (Highly Satisfied), Experience = Expectation is Simple Confirmation (Moderately Satisfied), Experience < Expectation is Negative Disconfirmation (Dissatisfied)

Table 14 presents the disconfirmation analysis across four user intent categories: Commercial, Informational, Navigational, and Transactional. All categories exhibited negative disconfirmation, indicating that user experiences consistently fell short of expectations. This pattern suggests a systemic issue within the implemented model, where anticipated outcomes were not adequately met. As a result, users provided negative feedback across all intent types, revealing shortcomings in expectation management within AI-powered systems. These findings raise concerns about system performance and user interface design, especially for platforms reliant on active user engagement. Insufficient expectation fulfillment adversely affected user satisfaction and their willingness to continue using the service.

This conclusion aligns with Yu et al. (2024), who examined continuance intention in AI painting applications using the Expectation Confirmation Model (ECM), the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), and Flow Theory. Their analysis demonstrated that satisfaction is strongly linked to expectation confirmation, emphasizing the need to balance user expectations with system performance to enhance satisfaction and engagement with AI platforms.

**Table 15. Analysis of Variance Results in Terms of Age**

| Variable | p-value | Interpretation | Remarks |
|---|---|---|---|
| User Expectation | | | |
| Commercial Intent | 0.155 | Not significant | Accept H0 |

| | | | |
|---|---|---|---|
| Informational Intent | 0.473 | Not significant | Accept H0 |
| Navigational Intent | 0.104 | Not significant | Accept H0 |
| Transactional Intent | 0.195 | Not significant | Accept H0 |
| User Experience | | | |
| Commercial Intent | 0.344 | Not significant | Accept H0 |
| Informational Intent | 0.522 | Not significant | Accept H0 |
| Navigational Intent | 0.227 | Not significant | Accept H0 |
| Transactional Intent | 0.696 | Not significant | Accept H0 |

Table 15 analyzes the age of the respondents with their expectations and experiences with AI chatbots based on the outcomes of the Analysis of Variance.

**User Expectation**

**Commercial Intent.** Since the p-value is 0.155, the table shows that there is no significant difference between age and their expectation as commercial intent with AI chatbots, accepting the null hypothesis. This is in contrast to the findings of Manigandan & Alur (2024). The study's conclusion showed that there is a high influence on the usability factors of AI chatbots based on age-related preferences and responses with the tool, indicating that age plays a significant role in shaping user expectation and trust in AI chatbots, including commercial usability and intent of use.

**Informational Intent.** Since the p-value was 0.473, the results indicated no significant difference between respondents' age and their expectations regarding informational intent, leading to acceptance of the null hypothesis. This contrasts with Wang and Lo (2025), who found a significant interaction between age and AI chatbot response time, suggesting that conversational pacing influences user expectations and satisfaction.

**Navigational Intent.** Since the p-value is 0.104, the table indicates no significant difference in user expectations across age for navigational intent, meaning to say that the null hypothesis is accepted. This is aligned with the study of Zhu et al. (2024), where the findings showed that despite the fact the older respondents have slower navigational performance, it does not significantly affect how they expect an AI chatbot to cater their needs. The results showed consistency across age groups in expecting similar functionality and access to relevant information, specifically for AI chatbots to guide and help users locate desired content.

**Transactional Intent.** With a p-value of 0.195, the results indicated no significant difference in user expectations regarding transactional intent based on age, leading to acceptance of the null hypothesis. This suggests that expectations of chatbot-assisted transactions did not vary significantly among Generation Z age groups. This finding aligns with Bunea et al. (2024), who reported that user expectations in transactional contexts are influenced more by exposure, usage, and knowledge of the tool than by age, indicating similar expectations across these groups.

**User Experience**

Commercial Intent. Since the p-value is 0.344, the table shows that there is no significant difference in the commercial experience of Al chatbots across all age groups. This means that Generation Z generally reports similar experiences when using chatbots for commercial purposes, having the null hypothesis accepted. This is supported by the study of Law et al. (2023), where results revealed that instead of age,

prior experience with AI chatbots shape how users perceive and trust the chatbot's performance, indicating that users—regardless of age—generally have similar commercial experiences.

**Informational Intent.** Since the p-value is 0.522, the table indicates no significant difference in user experience in terms of informational intent based on age, indicating that the null hypothesis is accepted. Generation Z users have experienced similar levels of information delivery from Al chatbots. This is in contrast with the findings of Følstad & Brandtzaeg (2020), where the results showed that older respondents tend to focus and be more sensitive to efficient assistance, and younger respondents lean more on emotional attributes of AI chatbot responses in delivery of information.

**Navigational Intent.** Since the p-value is 0.227, the table shows that there is no significant difference in navigational experience with chatbots across all ages, indicating that the null hypothesis is accepted. This suggests that all Generation Z age groups find the chatbot equally helpful in guiding or locating content. This is supported by the study of Xu et al. (2023), where findings suggest that the consistency in experiences across age groups is due to a grounded and intuitive design of chatbot interfaces, which reduces complexity and allows users, regardless of age, to easily locate the desired content.

**Transactional Intent.** Since the p-value is 0.696, the table indicates no significant difference in transactional experience across all Generation Z ages, signifying that the null hypothesis is accepted. Thus, Generation Z users report similar experiences in completing tasks or transactions through Al chatbots. where results revealed that age does not significantly influence the transactional This was supported by the findings of Uddin et al. (2024) where factors such as system quality, ease of use, and familiarity were shown to have a stronger impact on how chatbots are experienced during transactions, suggesting that users tend to have similar experiences due to shared online competence and comfort with tools.

**Table 16. Independent Samples T -Test Results in Terms of Sex**

| Variable | p-value | Interpretation | Remarks |
|---|---|---|---|
| User Expectation | | | |
| Commercial Intent | 0.013 | Significant | Reject H0 |
| Informational Intent | 0.138 | Not Significant | Accept H0 |
| Navigational Intent | 0.094 | Not Significant | Accept H0 |
| Transactional Intent | 0.000 | Significant | Reject H0 |
| User Experience | | | |
| Commercial Intent | 0.002 | Significant | Reject H0 |
| Informational Intent | 0.101 | Not Significant | Accept H0 |
| Navigational Intent | 0.118 | Not Significant | Accept H0 |
| Transactional Intent | 0.076 | Not Significant | Accept H0 |

Table 16 displays the findings of the Independent Samples T-Test regarding the satisfaction levels of male and female respondents when using an AI Chatbot for e-commerce purposes.

**User Expectation**

**Commercial Intent.** The analysis shows a p-value of 0.013, which is less than 0.05 thus, the null hypothesis was rejected. This describes that there is a striking difference between male and female users with respect to their expectations related to AI chatbots' commercial functionalities in e-commerce. More specifically, males and females differ in their expectations regarding the handling of promotional content,

recommendation, and sales chat by the chatbots. These findings align in the work by Pu et al. (2025) where it showed that there is a considerable difference among users based on gender in regard to their perception of AI chatbots integrating productivity and relationship management with clients over e-commerce platforms as women, in most instances, expect more tailored commercial engagements than men.

**Informational Intent.** The p-value is 0.138, which is larger than 0.05, therefore, the null hypothesis is accepted. It appears that there is no considerable difference between the male and female users regarding the informational intent expectations on AI chatbots within an e-commerce context. It suggests that both men and women have similar expectations considering the manner in which chatbots deliver information regarding various products, services, and even company policies. This fits the findings of Lu et al. (2024) where they pointed out that users from different gender groups similarly held an expectation that AI chatbots would 'inform' them in a prompt and precise manner, suggesting that the expectation of having reliable information available is one that does not differentiate across gender.

**Navigational Intent.** Analysis showed a p-value of 0.094, falling above the 0.05 mark, which accepts the null hypothesis. In this case, there is no significant difference hypothesized between male and female users concerning their expectations on their navigational intents in AI chatbots in e-commerce. Both male and female users have similar anticipations regarding the functionality of chatbots in aiding users to navigate through e-commerce sites, identify products, and specific areas or attributes of the site. This finding aligns with the study of Chen et al. (2024) who noted that irrespective of gender, users consider ease of use coupled with supportive navigation as integral factors of e-service quality, which illustrates that expectations of navigation within digital contexts are no different across socio-economic divisions.

**Transactional Intent.** The p-value of 0.000, being below 0.01, led to the rejection of the null hypothesis. This indicated significant differences between males and females in their expectations of transactional intent regarding AI chatbot use in e-commerce customer service. The findings showed that men and women differed notably in expectations for chatbot functionalities related to transactions, order processing, payment, and purchasing. Consequently, e-commerce platforms may benefit from adopting gender-targeted designs for AI chatbot interfaces in transactional contexts. These results align with Saputra and Sutarso (2023), who found that female users of Shopee Indonesia expected greater ease of use and responsiveness from AI chatbots during transactions compared to males.

**User Experience**

**Commercial Intent.** The provided analysis shows a p-value of 0.002 which is less than 0.05, therefore the null hypothesis was rejected. This measures that the difference between user's sex and their commercial intent in utilizing AI chatbots for customer service in e-commerce is extremely high. There are major disparities among male and female users regarding the AI chatbots' commercial functions of offering product advertisements and serving informational promos. This indicates that the current AI Chatbot design is most likely perpetuating unequal user gender experiences in commercial engagements. This result supports Sun et al. (2020) findings which revealed that gender plays a significant role in the e-commerce service quality and satisfaction with promotional service interactions where females, on average, give more negative assessments of commercial activities than males.

**Informational Intent.** The computed p-value is 0.101, which is higher than 0.05. Therefore, the null hypothesis has failed to be rejected. This indicates that there is no difference on the basis of gender for the experience of informational intent with AI chatbots for customer service in e-commerce. Both male and female users report a similar experience while eliciting information through AI chatbots, which implies

that the current AI chatbots have transcended gender biases in providing information. Folstad and Brandtzaeg (2020) reported that users of chatbots from both gender groups faced similar difficulties when interacting with AI chatbot systems that processed queries in an expertly elaborate manner; however, their satisfaction regarding the information provided was consistent, indicating that the information was offered regardless of the user's gender.

**Navigational Intent.** With the provided analysis, a p-value of 0.118 was calculated. Since it exceeds 0.05, the result indicates the null hypothesis was accepted. This suggests that there is no difference in the experience of male and female users with regard to navigational intent when utilizing AI Chatbots for customer service in e-commerce. Males and females equally experience interactions with AI chatbots in e-commerce, specifically in product searching and feature identification, which suggests that the services offered by AI chatbots are tailored to all genders. This is supported by Chen et al. (2021) who found that the navigational features of e-commerce platforms, including AI-assisted navigation, were equally valued by both males and females with regards to an effortlessly organized site and a functional search system.

**Transactional Intent.** As a result of the aforementioned analysis, a p-value of 0.076 was calculated. This exceeded the significance level of 0.05, therefore, the null hypothesis was accepted. This indicates that there is no pronounced difference between male and female users in relation to their experience concerning transactional intent when employing AI chatbots for customer services in the e-commerce industry. Men and women report a uniform experience when interfacing with AI chatbots for transaction-related activities. This suggests that current AI chatbots are proficient in transaction processing and offer experiences that are consistent across genders. Moreover, Utama (2024) supports such a claim as his research indicates that contemporary e-commerce sites equipped with AI technology have generated gender-neutral experiences whereby both males and females utilize and express similar levels of satisfaction during AI-assisted purchases.

**Table 17. Independent Samples T -Test Results in Terms of Civil Status**

| Variable | p-value | Interpretation | Remarks |
|---|---|---|---|
| User Expectation | | | |
| Commercial Intent | 0.030 | Significant | Reject H0 |
| Informational Intent | 0.123 | Not Significant | Accept H0 |
| Navigational Intent | 0.096 | Not Significant | Accept H0 |
| Transactional Intent | 0.003 | Significant | Reject H0 |
| User Experience | | | |
| Commercial Intent | 0.578 | Not Significant | Accept H0 |
| Informational Intent | 0.028 | Significant | Reject H0 |
| Navigational Intent | 0.050 | Significant | Reject H0 |
| Transactional Intent | 0.002 | Significant | Reject H0 |

Table 17 analyzes the civil status of the respondents on their AI chatbot expectations and experiences based on the outcomes of the Independent Samples T-Test.

**User Expectation**

**Commercial Intent.** Since the p-value is 0.030, the table shows that there is a significant difference between the civil status and user expectation with regards to the commercial intent, which signifies that

the null hypothesis is rejected. This means that groups under civil status have differing insights on how they perceive the commercial performance of an AI chatbot during interaction. This contrasts with the findings of Miraz et al. (2024), who emphasized that user expectations regarding commercial intent were more strongly shaped by perceived utility and ease of use. In their study, civil status—viewed as a personal characteristic—did not significantly influence how users evaluated a chatbot's commercial capabilities, suggesting more uniform expectations across such demographic lines.

**Informational Intent.** With a p-value of 0.123, the table shows that there is no significant difference between civil status and user expectation with regards to informational intent, meaning the null hypothesis is accepted. This indicates that individuals from different civil status groups tend to hold relatively similar expectations about how AI chatbots deliver information. This finding contrasts with the study by Cheng et al. (2024), which highlighted that user experiences in chatbot-assisted engagements were shaped more by the quality of interaction than by user demographics such as civil status. Their research suggests that expectations tied to informational delivery are influenced more by system-level features—like clarity, relevance, and responsiveness—than by personal characteristics, reinforcing the minimal impact of civil status in this context.

**Navigational Intent.** A p-value of 0.096 was given in the table showing that there is no significant difference between the civil status and expectations of the respondents regarding navigational intent, meaning to say that the null hypothesis is accepted. This suggests that users, regardless of their civil statuses, perceive AI chatbots within the same expectations as to navigational intent. This is supported by Al-Shafei (2025), which found that factors such as communication style and perceived utility have a stronger influence on user expectations in chatbot interactions than demographic variables like civil status. This suggests that users perceive chatbot guidance functions similarly regardless of their personal background.

**Transactional Intent.** Since the p-value is 0.003, the table shows that there is a significant difference between the civil status and user expectations with regards to transactional intent, making the null hypothesis rejected. This signifies that user expectations as to transactional intents differ based on their civil status. This is in contrast with Alagarsamy & Mehrolia (2023), which showed that trust-related factors were more influential in user expectations, suggesting that user trust and design familiarity may moderate or override the impact of personal demographics like civil status.

**User Experience**

**Commercial Intent.** The p-value of 0.578 indicated no significant difference in experiences of commercial intent between single and married users, leading to acceptance of the null hypothesis. Both groups showed similar perceptions of AI chatbot handling of promotional content and product recommendations. However, this finding contradicts Yilmaz and Ashqa's (2025) study, which revealed that AI-generated marketing content varies with demographic factors, including civil status. For example, divorced women responded more to empowerment messages, while married individuals encountered messaging emphasizing stability and benefits. This highlights the importance of addressing demographic biases, such as civil status, in AI-generated commercial content.

**Informational Intent.** A p-value of 0.028 indicates that there is a significant difference in informational intent experiences between single and married users which rejects the hypothesis. Civil status has an impact on how users experience AI Chatbots as far as giving information related to a company's products, services, and policies is concerned. Married users might want more and detailed information while single

respondents might be content with very direct answers. This interpretation is consistent with Rehman et al. (2021), who analyzed how behavior related to information seeking, core technologies, and resilience work together to enhance the academic performance of students. In this study, marital status was treated as a demographic control variable and was found to impact information seeking, with married students having different behaviors than single students. While the focus of the study is on academic aspects, it highlights the importance of civil status when concerning information-seeking behavior that is available for use with AI chatbots.

**Navigational Intent.** With a p-value of 0.050, a significant difference was found in navigational intent experiences between married and single users, leading to rejection of the null hypothesis. This suggests that civil status influenced how users experienced AI chatbot navigation in e-commerce. Single users tended to prefer exploratory product discovery, while married users favored guided navigation to specific products or services. Supporting this, Calear et al. (2024) found that younger, mostly single users engaged in exploratory navigation when accessing web-based mental health services, whereas married users preferred direct navigation through menus and quick links. Although focused on healthcare, these findings highlight the impact of civil status and life stage on navigational preferences, underscoring the need for tailored AI chatbot designs in e-commerce.

**Transactional Intent.** A p-value of 0.002 indicated a significant difference in transactional intent experiences between single and married users, leading to rejection of the null hypothesis. Civil status influenced how users perceived AI chatbot handling of transactions, order processing, payment management, and purchase facilitation. This difference may reflect married users' preference for secure and efficient processes, while single users favored speedier transactions. Roh and Park (2023) observed that marital status affected decision-making dependence in technology-enabled services, with married users engaging more in meal planning and single users relying more on single-serve delivery services. These behavioral differences demonstrate how civil status shapes digital service preferences and, by extension, AI chatbot usage.

**Table 18. Analysis of Variance Results in Terms of Educational Attainment**

| Variable | p-value | Interpretation | Remarks |
|---|---|---|---|
| User Expectation | | | |
| Commercial Intent | 0.971 | Not significant | Accept H0 |
| Informational Intent | 0.087 | Not significant | Accept H0 |
| Navigational Intent | 0.205 | Not significant | Accept H0 |
| Transactional Intent | 0.180 | Not significant | Accept H0 |
| User Experience | | | |
| Commercial Intent | 0.483 | Not significant | Accept H0 |
| Informational Intent | 0.008 | Significant | Reject H0 |
| Navigational Intent | 0.017 | Significant | Reject H0 |
| Transactional Intent | 0.000 | Significant | Reject H0 |

Table 18 analyzes the educational attainment of the respondents on their AI chatbot expectations and experiences based on the outcomes of the Analysis of Variance.

**User Expectation**

**Commercial Intent.** Since the p-value is 0.971, the table shows that there is no significant difference between the educational attainment of the respondents and their expectations regarding commercial intent, signifying that the null hypothesis is accepted. This suggests that users, regardless of their education level, expect the same kind of commercial interaction from Al chatbots. This contrasts with the findings of Dippold (2022), which showed that educational attainment significantly influences user expectations, as these are shaped by sociolinguistic backgrounds and language ideologies developed through educational experiences.

**Informational Intent.** With a p-value of 0.087, there is no significant difference between educational attainment and user expectations related to informational intent, meaning the null hypothesis was accepted. Users across different educational backgrounds seem to expect similar levels of information delivery from chatbots. This is supported by Saglam et al. (2025), where results show that user concerns and expectations were more significantly influenced by age rather than educational level. This suggests that users across different educational backgrounds have similar expectations regarding the informational capabilities of chatbots.

**Navigational Intent.** Since the p-value is 0.205, the result shows no significant difference in expectations regarding how the chatbot helps with navigation, indicating that the null hypothesis was accepted. This means educational level doesn't strongly influence how users expect the chatbot to assist them in finding or locating information. The findings are supported by Almahri et al. (2024) which found that different educational levels and found no moderating effects of educational attainment on users' behavioral intentions to use chatbots as they focus more on habits, effort, and performance expectancies.

**Transactional Intent.** With a p-value of 0.180, the table indicates no significant difference between educational attainment and user expectations on transactional intent, indicating that the null hypothesis was accepted. Users appear to have similar expectations about how well chatbots handle tasks or transactions, regardless of their education level. This is supported by Meng et al. (2025), which found that user expectations and purchase intention are shaped more by interaction style rather than by user demographics like educational attainment. Their findings suggest that experiential factors, not education level, drive how users perceive a chatbot's ability to handle tasks, specifically transactional conversations.

**User Experience**

**Commercial Intent.** With the data above, a p-value of 0.483 was shown. Since it is higher than 0.05, this suggests that there is no significant difference in user experience and commercial intent in terms of their educational attainment. Thus, the null hypothesis was accepted. This means that regardless of their educational level, users generally have the same experience with commercial features of AI chatbots, such as finding trustworthy products. This is in contrast to the study made by Lin and Parker (2025), which shows that the higher the educational attainment of the workers are, the higher they find and experience AI chatbots helpful in finishing their tasks, including those with commercial intent.

**Informational Intent.** A p-value of 0.008 shows that there is a significant difference in user experiences in relation to informational intent and educational attainment. With this, the null hypothesis was rejected. This means that the level of education has an influence with the way users experience the information provided by AI chatbots differently. This is in accordance with the study of Abdelkader (2023), as he found out that individuals with higher levels of education have a better experience with AI chatbots than

those with lower levels of education because they are more likely to be familiar with its benefits and trust it to provide accurate information.

**Navigational Intent.** With a p-value of 0.017, the data shows that there is a significant difference in user experience in relation to educational attainment of the respondents and informational intent. Thus, the null hypothesis is rejected. This means that user experience with navigating AI chatbots varies depending on their educational attainment. According to Wang et al. (2023), users with different educational backgrounds demonstrated varying levels of ease in managing chatbot interactions, suggesting that education can influence how effectively users navigate AI systems.

**Transactional Intent.** Since the p-value is 0.000, which is lower than 0.05, the results indicated that there is a significant difference in transactional experience of users depending on their educational backgrounds. Thus, the null hypothesis is rejected. This means that users with varying education levels, experience having transactions like payment with AI chatbots in ecommerce differently. The study of Singh et al. (2024) is connected with this result, as they explained that users with higher education tend to be more cautious of chatbot privacy and functionality, influencing their transactional experience in using AI chatbots, suggesting that educational background plays a significant role in shaping user expectations, which in turn affect how users interact and evaluate chatbot systems during transactions.

**Table 19. Analysis of Variance Results in Terms of Monthly Income**

| Variable | p-value | Interpretation | Remarks |
|---|---|---|---|
| User Expectation | | | |
| Commercial Intent | 0.875 | Not significant | Accept H0 |
| Informational Intent | 0.617 | Not significant | Accept H0 |
| Navigational Intent | 0.805 | Not significant | Accept H0 |
| Transactional Intent | 0.405 | Not significant | Accept H0 |
| User Experience | | | |
| Commercial Intent | 0.470 | Not significant | Accept H0 |
| Informational Intent | 0.116 | Not significant | Accept H0 |
| Navigational Intent | 0.669 | Not significant | Accept H0 |
| Transactional Intent | 0.021 | Significant | Reject H0 |

Table 28 presents the monthly income of the respondents on their AI chatbot expectations and experiences based on the outcomes of the Analysis of Variance.

**User Expectation**

**Commercial Intent.** As the above data showed, the p-value is 0.875. Since it is higher than 0.05, it indicates that there is no significant difference in commercial intent under user expectation based on monthly income. Thus, the null hypothesis was accepted. This indicates that across different income levels, the expectation of users on commercial intents of AI chatbots is similar. This is in accordance with the study of Thi and Duong (2025), where they found out that users generally expect similar commercial functions from AI chatbots, no matter their income level.

**Informational Intent.** With a p-value of 0.617, which is greater than 0.05, the data showed that the monthly income of the respondents does not have a significant difference with their expectation regarding informational intent. Therefore, the null hypothesis was accepted. This suggests that users have similar

expectations with information from AI chatbots regardless of their income level. The findings align with the study of Gerlich (2023), stating that the levels of income have no significant effect on the expectation of users on informational intent of AI chatbots because the need for accurate information is universal regardless of income.

**Navigational Intent.** With the result above, a p-value of 0.805, which is above 0.05. This indicated that there is no significant difference in user expectation in navigational intent based on their income level. Therefore, the null hypothesis is accepted. This means that regardless of their monthly income, the expectation of users in navigating AI chatbots is similar. According to Alagarsamy and Mehrolia (2023), perceived risk and trust in navigating digital platforms, including AI systems, do not significantly differ across income levels, suggesting consistent expectations in user interaction behavior.

**Transactional Intent.** A p-value of 0.405 shows that the result was not statistically significant. Thus, the null hypothesis is accepted. This means that income does not have an influence with user expectation regarding transactional intent in AI chatbots, implying that users with different income do not share the same expectations. According to Alagarsamy and Mehrolia (2023), ease of use is one of the factors in shaping user expectations when having transactions with AI chatbots, regardless of their income levels.

**User Experience**

**Commercial Intent.** With a p-value of 0.407, the result is not statistically significant since it is higher than 0.05. This means that monthly income does not have a significant effect on user experience regarding the commercial intent of users. Thus, the null hypothesis was accepted. This means that regardless of income levels, users experience the commercial intent of AI chatbots similarly. According to the study of De Andrade and Tumelero (2022), AI chatbots are designed to provide consistent and efficient service experiences, which likely leads to similar commercial interactions across different income levels.

**Informational Intent.** Since the p-value was 0.116, which is above 0.05, the results indicate that there is no significant difference in informational intent regarding user experience across income levels. As a result, the null hypothesis was accepted, as this suggests that there is a similar experience in AI chatbots regarding informational intent among income levels of users. As stated by Agnihotri and Bhattacharya (2023), users value the clarity of information in AI chatbots. Thus, user experience with informational aspects of chatbots remains consistent across different income levels.

**Navigational Intent.** The p-value for this intent was 0.669, indicating no significant difference in user experience based on their monthly income. Considering this, the null hypothesis was accepted. This means that users have similar experiences with navigational features regardless of their income. According to Ashfaq et al. (2025), income does not make a difference in the experience of users in AI chatbots because they mainly care about the way on how to quickly and effectively find what they need.

**Transactional Intent.** With a p-value of 0.021, the result shows a significant difference in user experience with transactional intent with regards to monthly income. Hence, the null hypothesis was rejected, suggesting that the income levels of users affect how they experience AI chatbot in relation to transactions. The study of Alagarsamy and Mehrolia (2023) supports this as they stated that because of the perceived risk associated with digital transactions with AI chatbots, such as security and privacy, higher-income users experience less risk as they have higher financial security unlike lower-income users.

## 4. Conclusions and Recommendations

4.1.Conclusions. Based on the analyzed data, the following conclusions have been reached:

4.1.1. The profile of the respondents showed that:
4.1.1.1. in terms of age, the majority of the respondents were 21- to 23-year-olds:
4.1.1.2. in terms of sex, the majority of the respondents were females;
4.1.1.3. in terms of civil status, the majority of the respondents were single;
4.1.1.4. in terms of educational attainment, the majority of the respondents were college graduates; and
4.1.1.5. in terms of income levels, the majority of the respondents were earning below 10,957 pesos.
4.1.2. The level of satisfaction of the respondents showed that:
4.1.2.1. in terms of commercial intent, respondents were dissatisfied;
4.1.2.2. in terms of informational intent, respondents were dissatisfied;
4.1.2.3. in terms of navigational intent, respondents were dissatisfied; and
4.1.2.4.in terms of transactional intent, respondents were dissatisfied;
4.1.3. The analysis revealed that there are no significant differences in user expectations across age groups, and only commercial intent showed a significant difference based on sex. For civil status, it significantly affected both expectations and experiences across most intents, while educational attainment only failed to reject the informational, navigational, and transactional under user experience. Monthly income showed a significant difference only in transactional intent for user experience.
4.1.4. The most common challenges experienced by users when interacting with AI chatbots is mainly its lack of emotional intelligence. Moreover, chatbots were seen as robotic, lacking personalization, and unable to recognize frustration and offer human support when needed, affecting their satisfaction, indicating that there is a moderate challenge in using AI chatbots in ecommerce.
4.2. Recommendations. Based on the results of the study, the researchers suggest taking concrete steps to mitigate the negative gap perceived by users related to AI chatbot interactions on e-commerce platforms. These recommendations include:
4.2.1. Respondents of the Study. Encouraging other profiles beyond the predominant one in this study: 21-year-old, single, female college graduates with low income, would be beneficial for later researchers. Such integration can capture a wider perspective of comprehensive user satisfaction with AI chatbots. Future studies can also focus on different factors that may explain satisfaction and increase the overall validity of the results.
4.2.2. Dissatisfaction of Users. Users have reported dissatisfaction with all types of intents which needs to be resolved as follows: (1) Informational intent: Modify training data, scripts, and FAQs to improve the quality, relevance, and clarity of chatbot answers. (2) Navigational intent: Use shortcut buttons and imperative text to streamline command-based interfaces so that users may find products and services more easily. (3) Commercial transaction: Improve integration of systems by providing digital receipts, updating transactions in real-time, and having buttons for easy access to order, payment, and refund status in order to reduce confusion and increase trust. (4) Commercial intent: Users should be allowed to control promotional messages and commercials, but mandatory labeling on promotional content must still be adhered to. (5) In addition, implement auditing with satisfaction ratings after each interaction and perform regular audits to rate the speed, tone, and responsiveness of the chatbot. These steps will help ensure that service standards are achieved and sustained.
4.2.3. No Significant Difference between Respondents' Profile. Even though the study discovered no significant difference regarding expectations and experiences across most demographic reasons, a few minor differences were observed. This suggests that the motives chosen for a study may not have been comprehensive enough to highlight meaningful differences. Additional robust and systematic

psychosocial variables like empathy, tendencies of customers' loyalty, and understanding of AI technology may enhance their explainable framework regarding user satisfaction and provide deeper analysis breadth beyond simplistic demographic profiling.

4.2.4. Lack of Emotional Intelligence Challenge. To address the pervasive concern of AI chatbots being unable to recognize feelings, a mixed human-AI hybrid support system is proposed. In this model, complex or emotionally charged queries are handled by human support agents, while chatbots are trained on informal call-in speech to understand conversational language better. Emotion detection systems should also be instituted to flag users showing frustration for immediate human intervention. By making support feel more personal and empathetic, user satisfaction stands to gain the most.

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