

**CHATBOTS IN E-COMMERCE: A STUDY OF GEN Z CUSTOMER EXPERIENCE AND ENGAGEMENT – FRIEND OR FOE?***CHATBOTS DALAM E-COMMERCE: STUDI TERHADAP PELANGGAN GEN Z PENGALAMAN DAN KETERLIBATAN – TEMAN ATAU LAWAN?*

By:

**Christania A. J. Tamara<sup>1</sup>**  
**Willem J. F. Alfa Tumbuan<sup>2</sup>**  
**Emilia Margareth Gunawan<sup>3</sup>**

<sup>123</sup>Management Department Faculty of Economics and Business  
Sam Ratulangi University Manado

E-mail:

<sup>1</sup>[tamarachristania@gmail.com](mailto:tamarachristania@gmail.com)<sup>2</sup>[alfa.tumbuan@unsrat.ac.id](mailto:alfa.tumbuan@unsrat.ac.id)<sup>3</sup>[emilia\\_gunawan@unsrat.ac.id](mailto:emilia_gunawan@unsrat.ac.id)

**Abstract:** With chatbots becoming more common in e-commerce, concerns have arisen about how Gen Z users perceive these virtual assistants. This study intends to investigate how Gen Z perceives chatbots in general and how they impact customer engagement and the e-commerce experience. Using semi-structured online interviews, a qualitative study methodology was used to collect information from 15 Generation Z individuals who had interacted with chatbots on e-commerce platforms in Manado City, Indonesia. In-depth knowledge of the perspectives, experiences, and complex actions of Gen Z customers around chatbots in e-commerce is made possible by the use of thematic analysis, which identifies patterns and themes in the data that has been collected. According to research, chatbots are often viewed as allies by Gen Z customers as they offer convenience, quick replies, and around-the-clock accessibility. However, there are problems with their ability to understand difficult questions and provide customized solutions. The study's conclusions emphasize the significance of elements like information accuracy, personalization, and interface usability in determining how Gen Z clients interact and interact with chatbots. By identifying areas for improvement and adjusting chatbot interactions to meet the expectations of Gen Z clients, e-commerce organizations may optimize customer care initiatives and improve customer experiences. The recommendations include enhancing chatbot functionality and design, personalizing interactions to users' interests, encouraging openness and trust, providing smooth human handoffs, and implementing multi-channel support.

**Keywords:** chatbots, e-commerce, customer experience, customer engagement

**Abstrak:** Dengan semakin umumnya penggunaan chatbot dalam e-commerce, muncul kekhawatiran tentang bagaimana pengguna Gen Z mempersepsikan asisten virtual ini. Penelitian ini bertujuan untuk menyelidiki bagaimana Gen Z mempersepsikan chatbot secara umum dan bagaimana chatbot tersebut berdampak pada keterlibatan pelanggan dan pengalaman e-commerce. Dengan menggunakan wawancara online semi-terstruktur, metodologi penelitian kualitatif digunakan untuk mengumpulkan informasi dari 15 individu Generasi Z yang telah berinteraksi dengan chatbot di platform e-commerce di Kota Manado, Indonesia. Pengetahuan mendalam tentang perspektif, pengalaman, dan tindakan kompleks pelanggan Gen Z seputar chatbot dalam e-commerce dimungkinkan melalui penggunaan analisis tematik, yang mengidentifikasi pola dan tema dalam data yang telah dikumpulkan. Menurut penelitian, chatbot seringkali dilihat sebagai sekutu oleh pelanggan Gen Z karena mereka menawarkan kenyamanan, balasan cepat, dan aksesibilitas 24 jam. Namun, terdapat masalah dengan kemampuan chatbot untuk memahami pertanyaan yang sulit dan memberikan solusi yang disesuaikan. Kesimpulan penelitian ini menekankan pentingnya elemen seperti akurasi informasi, personalisasi, dan kegunaan antarmuka dalam menentukan bagaimana klien Gen Z berinteraksi dan terlibat dengan chatbot. Dengan mengidentifikasi area-area yang perlu diperbaiki dan menyesuaikan interaksi chatbot sesuai dengan harapan klien Gen Z, organisasi e-commerce dapat mengoptimalkan inisiatif layanan pelanggan dan meningkatkan pengalaman pelanggan. Rekomendasi tersebut mencakup meningkatkan fungsionalitas dan desain chatbot, mempersonalisasi interaksi sesuai dengan minat pengguna, mendorong keterbukaan dan kepercayaan, menyediakan proses serah terima yang mulus antara chatbot dan manusia, serta mengimplementasikan dukungan multi-kanal.

**Kata Kunci:** chatbot, e-commerce, pengalaman pelanggan, keterlibatan pelanggan

**Research Background**

Businesses now frequently use chatbots to provide 24/7 customer service and support, speed response times, and improve client experience. The result is that the worldwide chatbot market is growing rapidly. Using messaging services, websites or mobile applications, chatbots are artificial intelligence (AI) systems that mimic human-like discussions with users (Srivastava, 2020). The first chatbot, ELIZA, was developed by computer scientist Joseph Weizenbaum in the mid-20th century, circa 1960. ELIZA is software that can replicate human interaction by using direct rules to rephrase questions as statements and using keywords to generate answers. A significant breakthrough in AI, ELIZA paved the way for future developments in chatbot technology. Since then, chatbots have evolved into more sophisticated tools that are currently used in a variety of sectors, including e-commerce, healthcare, and banking. They may be programmed to perform a variety of jobs, from responding to simple consumer inquiries to making customized product suggestions based on a user's previous purchases.

The fact that chatbots are increasingly acting like real people in their conversations is an interesting truth about them. Today, many chatbots come with machine learning algorithms that allow them to take lessons from past conversations and evolve their replies over time. Some chatbots are so sophisticated that consumers may not even realize they are talking to a computer. Another interesting aspect of chatbots is that in the coming years, customer service is likely to see a significant increase in their importance. The worldwide chatbot market size is estimated at USD 5,132.8 million by 2022 by Grand View Research, with an estimated compound annual growth rate (CAGR) of 23.3% from 2023 to 2030. This expansion may be related to increased corporate acceptance of customer, support activities for operational cost reduction, as well as the requirement to provide client service 24/7, lowering operating costs, and increasing consumer demand for self-service operations. The ability to provide timely services at lower prices thanks to the use of chatbots has increased the demand for chatbots in various industries.

Due to changes in lifestyle, more and more people in Indonesia are using cell phones and the internet. According to a DataReportal study, Indonesia's population, which reached 276.4 million as of January 2023, continues to increase. In fact, according to the latest data, the population will increase by 1.8 million people, or 0.6%, between 2022 and 2023. Indonesia is an interesting and dynamic country to study and visit because of its fast development, which is a sign of the nation's sustainability. economic and social progress. DataReportal's latest figures show that Indonesia had 212.9 million internet users at the start of 2023, with a penetration rate of 77.0 percent. Additionally, the country has a sizeable community of social media users, with 167.0 million active users as of January 2023, or 60.4% of the total population. Additionally, Indonesia has 353.8 million active cellular connections, or 128.0 percent of the country's total population. Hence, chatting has developed into a common means for individuals to communicate on a regular basis.

In developing countries like Indonesia, which has maintained a consistent development momentum and is considered one of the best performing developing markets, the emergence of chatbots is very significant. There are now more than 21 million digital customers in Indonesia as a result of the accelerated adoption of digital technology due to the recession caused by the pandemic. Indonesia's internet economy is expected to reach US\$146 billion by 2026, with conversational commerce seeing tremendous growth as a result of its capacity to provide customers with a seamless buying experience. With the help of chatbots and AI assistants, this technology enables businesses to interact with millions of customers, providing personalized experiences and minimizing information asymmetries.

Gen Z customers are a large target demographic for organizations in the e-commerce space. Gen Z customers born between 1997 and 2012 are considered digital natives because they grew up with technology. Determining how they feel and behave with chatbots is critical to determining how this technology will impact the marketplace. They grew up at a time when technology and the internet were constants in their lives, leading them to be called "digital natives". Their buying habits are heavily influenced by this. Previous studies of Gen Z customer attitudes toward chatbots have come to a variety of conclusions. While some studies have shown that they are perceived negatively and can be annoying, others have found that they are perceived as good and help increase engagement. With an average daily online time of 10 hours, Gen Z is the most connected generation to the internet, according to several surveys. Compared to previous generations, they are also more likely to use mobile devices to make purchases. In fact, according to a Shopify poll, 67% of Gen Z respondents completed a purchase in the previous six months using their mobile device. The demand for original and customized experiences is another trait of Generation Z. They are more likely to be influenced by online reviews and social media, and they are more likely to trust peer and influencer recommendations than traditional advertising. As a

result, ecommerce companies that value openness, authenticity, and customized experiences are more likely to appeal to this consumer group. As a result of increasing awareness of social and environmental concerns, Gen Z is also more inclined to support companies that share their beliefs. For goods and services that are sustainable and environmentally friendly, they are willing to pay extra. Gen Z customers tend to be attracted to brands that prioritize sustainability and social responsibility in their business operations.

Generation Z in Indonesia is distinguished by its proximity to technology and social media. The way Indonesian youth consume media, with their high percentage of cell phone and internet use, makes this clear. In Indonesia, 98 percent of internet users between the ages of 16 and 24 use social media, with YouTube, WhatsApp and Instagram being the most used platforms, according to a 2019 poll by the Global Web Index (GWI). This pattern is expected to continue as Indonesia's economy and internet infrastructure progress, giving the younger generation greater access to digital technology. In conclusion, Gen Z is a technologically advanced generation that values social and environmental responsibility and genuine individual experience. An ecommerce business that can meet these standards is likely to be successful in attracting and retaining this customer group. Research is still needed to fully understand the attitudes and actions of Gen Z customers regarding chatbots in Indonesian e-commerce businesses. By examining whether chatbots are seen as friends or foes in the e-commerce context by Indonesian Gen Z customers, this research seeks to close this gap.

### **Research Objective**

The objective of this research is to explore the Gen Z Customers Experience and Customer Engagement of chatbots in e-commerce.

## **THEORETICAL REVIEW**

### **Customer Experience**

In their 2007 study, Meyer and Schwager offered a view of the customer experience as a mix of consumers' cognitive, emotive, and sensory reactions to their contact with a company. They also recommend methodologies for measuring how well customer experience efforts are working. This study contributes to the development of customer experience as a separate field of study and lays the foundation for future related research.

### **Customer Engagement**

Customer engagement has been a topic of interest for scholars and practitioners in the field of marketing and service management for several decades. The concept has evolved from early customer satisfaction theories to a broader and more complex phenomenon that involves customers' emotional, cognitive, and behavioral connections with a company. The first customer engagement theory emerged in the early 1990s when researchers proposed that customer satisfaction could be a key driver of customer loyalty and retention (Brodie et al., 2011). In recent years, there has been an increasing interest in socially responsible customer engagement. Kim et al. (2021) proposed that socially responsible customer engagement involves customers' willingness to engage in socially responsible activities that are aligned with a company's values and mission. This type of engagement can lead to enhanced brand loyalty and positive brand image. The types of customer experience can also play a role in customer engagement. For example, Bowden-Everson, Danaher, and Elliott (2013) investigated the role of satisfaction, trust, and delight in engaging customers for loyalty in the restaurant industry. They found that customer satisfaction and trust are important drivers of customer engagement, but delight can also play a role in creating emotional connections with customers.

### **Customer Experience and Customer Engagement**

Customers who have positive experiences with store attributes are expected to engage more enthusiastically with the store, pay more attention to and be interested in anything associated with the store, and be motivated to shop more due to social interaction (Vivek, 2009; Ramly and Omar, 2017).

### **Previous Research**

Kushwaha, Kumar, and Kar (2021) investigated the influencing factors of AI-based chatbots from the lens of CX theories for B2B firms. In this paper, a model for organizing CX has been proposed using the diffusion of innovation theory, trust commitment theory, information systems success model, and Hoffman & Novak's flow model for the computer-mediated environment and verified using the social media data. The methodology used



for this study is the social media analytics-based content analysis method (sentiment analysis, hierarchical clustering, topic modeling) for data preparation, followed by lasso and ridge regression for model verification. The results suggest that CX in B2B enterprises using chatbots is influenced by these bots' overall system design, customers' ability to use technology, and customer trust towards brand and system.

Chen, Le, and Florence (2021) explored the role of AI chatbots in influencing the online customer experience and customer satisfaction in e-retailing. A research model based on the technology acceptance model and information system success model is proposed to describe the interrelationships among chatbot adoption, online customer experience and customer satisfaction. Personality is a moderator in the model. The authors used a quantitative approach to collect 425 useable online questionnaires and Statistical Product and Service Solutions (SPSS) and SmartPLS to analyze the measurement model and proposed hypotheses. The usability of the chatbot had a positive influence on extrinsic values of customer experience, whereas the responsiveness of the chatbot had a positive impact on intrinsic values of customer experience. Furthermore, online customer experience had a positive relationship with customer satisfaction, and personality influenced the relationship between the usability of the chatbot and extrinsic values of customer experience

Hudiyono (2022) explored whether recipients of the Indonesia Customer Experience Champions 2022 as Best of The Best Customer Experience Team prize use chatbots effectively to improve their customer experience. Using a qualitative method, we explore their programs related to customer experience, along with the information regarding their chatbots. Then, we directly use two chatbots to gather our personal experience. We found that only four of eight winners use chatbots. Next, from our personal experience, the two chatbots are not yet functioning optimally because of some inaccurate or unclear information.

## RESEARCH METHOD

### Research Approach

Qualitative research approach is a research method that focuses on exploring and understanding social phenomena through the collection and analysis of non-numerical data such as interviews, observations, and documents (Braun and Clarke, 2019; Creswell and Poth, 2018). It is suitable for this study, which aims to explore the impact of chatbots on Gen Z's e-commerce customer experience and engagement, also to understand their perception of chatbots in e-commerce.

### Informant Criteria

For this research, the author selected 15 individuals from the Gen Z demographic in Indonesia, specifically those aged 20 and above who are either currently enrolled in college or have already graduated. The focus is on those who have interacted with chatbots on e-commerce platforms with a particular emphasis on those residing in Manado City. In finding the informants who are suitable and available to do the interview, the survey online was conducted through the Instagram story polling feature.

### Sampling Technique

Purposive sampling is a non-probability sampling technique used in qualitative research where participants are intentionally selected based on specific criteria that meet the research objectives (Palinkas et al., 2015). In the context of this study, purposive sampling would be appropriate as the focus is on Gen Z customers in Indonesia, especially the Gen Z consumers in Manado City who have engaged with chatbots in e-commerce, and therefore participants need to meet the criteria of being a Gen Z customer who has experience with chatbots in e-commerce. The sampling technique involves selecting participants who meet specific characteristics or criteria relevant to the research questions and objectives. The criteria for participant selection will be based on demographic characteristics, experiences, or expertise, among others. In this study, maximum variation sampling would be suitable to capture a broad range of perspectives on the use of chatbots in e-commerce among Gen Z customers in Indonesia, especially the Gen Z consumers in Manado City who have engaged with chatbots in e-commerce. This involves selecting participants who differ in age, gender, socioeconomic status, and other relevant characteristics to capture a diverse range of experiences and opinions (Patton, 2014).

### Type of Data & Data Source

The study aims to explore the impact of chatbots on Gen Z's e-commerce customer experience and engagement, also to understand their perception of chatbots in e-commerce. In this context, the type of data

required is primary data, which is collected through direct interaction with the respondents. The data collection technique for this study is semi-structured interviews. The interviews will be conducted directly if the informants are willingly to or also remotely using online video conferencing tools, which will allow for more convenient and accessible participation for the participants. The semi-structured format of the interviews will allow for flexibility in the conversation while still ensuring that the research questions and objectives are addressed.

### **Research Instrument**

For this study, the research instrument that is used the semi-structured online interviews. Semi-structured interviews are a type of qualitative research instrument that combines elements of both structured and unstructured interviews. In semi-structured interviews, the author has a pre-prepared list of open-ended questions, but the conversation is flexible and can be directed by the participant's responses. This allows for a more in-depth exploration of the research questions while still maintaining some level of consistency across participants. Semi-structured online interviews were chosen as the research instrument for this study as they offer several advantages. First, they allow for easy data collection and management as interviews can be conducted remotely through various online platforms. Second, they provide an opportunity for anonymity and comfortability for the participants, which can encourage more honest and open responses. Finally, they offer flexibility in terms of scheduling and convenience for both the author and the participants. In terms of academic references, several studies have utilized semi-structured interviews as a research instrument, including research on e-commerce and chatbots. For example, in a study by Lee and Choi (2019), semi-structured interviews were used to investigate the factors affecting consumer trust in chatbots in e-commerce. Also, the instrument of this study is the author itself. The author was equipped with notes, device that with the screenshot and recorder feature to conduct the online interview with informants and also camera, notes, laptop, and recorder.in order to conduct the direct interview with informants.

### **Data Analysis Method**

According to Miles and Huberman in Sekaran and Bougie (2016), there are generally steps in qualitative data analysis: Data collection, data reduction, data display, drawing and verifying conclusion. Data Collection is the process where the researcher or the author found the data or information from any kind of sources such as books, internet website, and gather deeper information directly from the informant. For this study, the semi-structured interviews will be conducted. The interviews will be conducted remotely using online video conferencing tools, which will allow for more convenient and accessible participation for the participants. The semi-structured format of the interviews will allow for flexibility in the conversation while still ensuring that the research questions and objectives are addressed.

### **Trustworthiness**

The trustworthiness of qualitative research refers to the credibility, transferability, dependability, and confirmability of the study findings (Lincoln and Guba, 1985). In order to ensure the trustworthiness of this study, the following strategies will be implemented there are credibility, transferability, dependability, and confirmability. Overall, the trustworthiness of the study findings will be established by using multiple data sources, triangulation, member checking, providing a thorough description of the research process, maintaining an audit trail, and ensuring transparency and replicability of the study.

## **RESULT AND DISCUSSION**

### **Customer Experience**

The findings of the study shed light on various aspects of customer experience (CX) in relation to chatbots in e-commerce. These findings can be discussed in the context of existing literature on CX and its impact on customer satisfaction and loyalty.

### **Interactions (Cognitive, Affective, And Sensory Responses)**

The study examined the familiarity of customers with chatbots in e-commerce and its influence on cognitive engagement. The findings indicate that a significant number of informants were familiar with chatbots, with some even describing them as appearing everywhere. This aligns with the literature that suggests familiarity with technology can positively influence cognitive engagement and user satisfaction (Roca, Chiu, and Martínez,

2006). It indicates that the presence of chatbots in e-commerce has become more prominent over time and that customers are becoming increasingly comfortable with their use.

### **Times Uses Chatbots**

The analysis of informant data revealed varying degrees of engagement with chatbots in terms of frequency of use. While some informants had limited involvement with chatbots, others showed a higher degree of engagement, using them more frequently. This finding resonates with the literature that emphasizes the need to motivate customers to utilize chatbots more frequently (Verhoef, Kannan, and Inman, 2015). It suggests that there is room for improvement in encouraging customers to interact with chatbots more often during their e-commerce experiences.

### **Benefits of Chatbots in E-Commerce**

The study highlighted several benefits of chatbots in e-commerce, including quick response capabilities, easy and clear provision of information, and the potential for personalized recommendations. These findings are consistent with previous research that has identified similar benefits of chatbots in enhancing customer experience (Huang and Chueh, 2021; Liao and Yan, 2022). The positive experiences reported by informants, such as the appreciation of quick responses and clear product information, indicate that chatbots have the potential to improve customer satisfaction and overall shopping experience.

### **Favorite Chatbot Feature**

The informants' preference for the fast or instant response feature of chatbots aligns with the literature on the importance of timely and efficient customer service (Verhoef, Kannan, and Inman, 2015). The positive response to the recommendation offering feature also suggests that personalized recommendations can contribute to a more satisfying user experience. However, the dissatisfaction expressed regarding the clear information feature and ease of use of chatbots highlights areas for improvement. These findings emphasize the need for chatbot developers to focus on enhancing response speed, personalization that aligned with the previous study from (Hudiyono, 2022), and information clarity to meet customer expectations.

### **Experience Talking to Chatbots as a Gen Z Customer**

The positive experiences reported by informants in interacting with chatbots, such as seamless engagement and prompt responses, align with the literature on the potential of chatbots to provide efficient and helpful customer support (Srivastava, 2021). The surprise expressed by some informants upon realizing they were interacting with chatbots indicates that the chatbot technology is becoming increasingly sophisticated in mimicking human-like interactions. However, the mention of one informant who found chatbots unhelpful highlights the importance of striking a balance between chatbot assistance and allowing customers to conduct their own research.

### **Suggestions for Improvement of Shopping Experience for Gen Z Customers**

The suggestions provided by informants offer valuable insights into enhancing the shopping experience for Gen Z customers. Their recommendations align with the literature on improving customer experience, such as providing more detailed information, personalization based on customer preferences, and intuitive chatbot design (Liao and Yan, 2022). The emphasis on reducing time spent on frequently asked questions and ensuring data privacy also reflects the importance of optimizing chatbot interactions for efficiency and trust-building.

### **Drawbacks of Using Chatbots in E-Commerce**

The identified drawbacks of chatbots in the study include limitations in understanding complex queries, difficulty in addressing unique or specific customer needs, and the impersonal nature of interactions. These findings resonate with existing literature on chatbot limitations (Huang and Chueh, 2021; Liao and Yan, 2022). The inability of chatbots to fully understand and address complex or unique customer queries can result in frustration and dissatisfaction. Additionally, the impersonal nature of interactions with chatbots may not meet the expectations of customers who seek personalized and human-like experiences.

### **Customer Engagement**

#### **Cognitive Engagement**



The findings presented in this study provide valuable insights into customer engagement in the e-commerce context, particularly in relation to cognitive engagement, chatbot usage, chatbot benefits, favorite chatbot features, customer experience, information provision, personalized shopping experience, and preferences for chatbots or human customer service representatives. These findings contribute to the existing literature on customer engagement by highlighting certain aspects of customer engagement in e-commerce settings.

The concept of customer engagement has evolved over time, and this research is in line with a broader understanding of customer engagement as a multidimensional construct involving cognitive, emotional, and behavioral components (Brodie et al., 2011). The findings on cognitive engagement highlight the platforms used by customers, with Shopee emerging as the most popular platform followed by WhatsApp Business and Tokopedia. This shows that the platform has managed to gain popularity and trust among the target population, most likely due to factors such as user-friendly interface, wide range of products, competitive prices and convenient messaging features. This study also explores the patterns of use of chatbots in e-commerce and the products that are most frequently purchased using chatbots. The findings show that chatbots are mostly used to purchase fashion and beauty products, followed by technology products and educational materials. This highlights the role of chatbots in facilitating the acquisition of different product categories and enhancing the shopping experience for customers.

Furthermore, this study explores the benefits of chatbots in e-commerce. The findings reveal that customers value the quick and direct response offered by chatbots, as well as the ease and clarity of information provided. This is in line with previous research which highlighted the importance of quick response capabilities and the provision of clear information in customer engagement (Brodie et al., 2011). Additionally, this study identified the potential for chatbots to offer personalized recommendations, though further research and development in this area is needed.

The favorite chatbot feature identified by customers is fast or instant response, which emphasizes the importance of speed and efficiency in chatbot interactions. The findings also indicate an overall positive customer experience interacting with chatbots, with reported seamless experiences at various stages of engagement, such as searching for products, inquiring about availability, and getting information about shipping and store hours. This is in line with the notion that chatbots can provide timely support and improve the general buying experience (Brodie et al., 2011).

Regarding the provision of chatbot information, this study identified the use of chatbots in providing quick access to general information, business hours, and guidelines for reporting problems. However, there are some limitations to be aware of, such as the inability to answer specific or detailed questions and provide all desired specifications and solutions. These findings highlight the strengths and weaknesses of chatbots in providing information, suggesting areas of improvement to improve effectiveness and overall user satisfaction. This study explores personalized shopping experiences with chatbots, and findings show that customers value personalized questions and recommendations based on their behavior and interests. However, there is still room for improvement in consistently providing a personalized experience and offering more options and information to enhance personalization. This aligns with a broader understanding of customer engagement that involves personalized interactions and customized experiences (Hollebeek, 2011).

When comparing preferences for chatbots or human customer service representatives, the majority of customers express a preference for human interaction and assistance in the e-commerce domain. Different with the previous study from (Shumanow and Johnson, 2020) that revealed that Consumers prefer interacting with chatbots that demonstrate a personality similar to their own. The study of Shumanow and Johnson (2020) emphasizes the importance of personality in the human-machine relationship, particularly within contextual interactions with service providers. However, a notable presence of individuals who find value in the combination of chatbots and human support, as well as those who rely solely on chatbot assistance, was observed. This preference underscores the importance of human customer service representatives in e-commerce, while recognizing the benefits of automated support.

### **Emotional Engagement**

Customer engagement has become a topic of significant interest in marketing and service management, with researchers exploring its multiple dimensions and their impact on customer loyalty and retention (Brodie et al., 2011). The concept of customer engagement has evolved over time to include the cognitive, emotional, and behavioral aspects of customer-company interaction (Brodie et al., 2011; Verhoef, Reinartz, and Krafft, 2010).

In the context of chatbots, research findings reveal that the majority of informants have a positive opinion about the perception of chatbots (Emotional Engagement). They perceive chatbots as generally helpful in their

interactions and value their ability to provide personalized information (Chatbots Perception). This aligns with the cognitive and emotional components of customer engagement, as customers' knowledge and understanding of the company (cognitive) and their affective (emotional) responses play a role in their engagement with the chatbot.

The benefits of chatbots in e-commerce highlighted in subsequent research findings contribute to customer engagement (The Benefits of Chatbots in E-Commerce). The quick and direct response offered by chatbots is appreciated by customers, as it saves time and effort (Feelings about Chatbots for Customer Service). The ease and clarity of information provided by chatbots enhances the overall buying experience and contributes to customer satisfaction (Benefits of Chatbots in E-Commerce). This benefit aligns with the cognitive and behavioral components of customer engagement, as it involves active participation and interaction of customers with chatbots. Favorite chatbot features identified in research findings, fast or instant responses, were highly appreciated by informants (Favorite Chatbot Features). This aspect contributes to the efficiency and convenience of chatbot interactions, which in turn increases customer engagement (Feeling about Chatbot for Customer Service). The recommendation offer feature is also considered valuable, although it is acknowledged that there is still room for improvement in this area (Favourite Chatbot Feature). Personalized features and better product recommendations are suggested to increase customer satisfaction and engagement (Feeling about Chatbot for Customer Service). These findings highlight the importance of tailoring chatbot responses to individual preferences and needs, which aligns with the cognitive and emotional components of customer engagement.

Informants' positive experiences in interacting with chatbots as Gen Z customers show the potential of chatbots to increase customer engagement (Experience Talking to Chatbots as a Gen Z Customer). A seamless experience in searching for products, getting information, and making purchases contributes to customer satisfaction and engagement (Experience Talking to Chatbots as a Gen Z Customer). The quick response and availability of options and product information was highly appreciated by customers (Feeling about Chatbots as a Gen Z Customer). These positive experiences and the perceived value of chatbots as a time-saving tool and convenient assistant contribute to customer engagement (Feelings about Chatbots as Gen Z Customers).

Regarding the influence of chatbots on brand trust, the results of the study show that chatbots can have a positive influence on brand trust for most informants (Influence on Brand Trust). The limited influence of chatbots on brand trust, reliance on accurate information provided by chatbots, and reliance on testimonials are factors that contribute to increased trust in brands (Influence on Brand Trust). This is in line with the cognitive component of customer engagement, because customer knowledge and understanding of brands play a role in building trust and engagement.

However, the research findings also highlight some of the disadvantages of using chatbots in e-commerce (Disadvantages of Using Chatbots in E-Commerce). Some informants expressed concern about the limitations of chatbots in handling complex questions or providing personalized recommendations (Disadvantages of Using Chatbots in E-Commerce). This shows that while chatbots are valued for their efficiency and quick response, there is still a need for human intervention in certain situations that require deeper knowledge or personalized assistance.

Another weakness mentioned in the research findings is the lack of human touch and empathy in chatbot interactions (Disadvantages of Using Chatbots in E-Commerce). Some informants felt that chatbots lacked the ability to understand and empathize with their specific needs or emotions, which could affect the overall customer experience and engagement. This highlights the importance of balancing automation with human interaction to provide a more holistic customer experience.

In addition, research findings indicate that the effectiveness of chatbots in increasing customer engagement may vary depending on context and industry (Effectiveness of Chatbots in Increasing Customer Engagement). While chatbots are considered valuable in e-commerce settings, their effectiveness in other industries, such as healthcare or finance, may vary. It is important to consider the specific requirements and expectations of customers in various domains when implementing a chatbot solution.

Overall, the research findings suggest that chatbots have the potential to positively impact customer engagement in e-commerce settings, particularly among Gen Z customers. The benefits of chatbots, such as quick response, personalized information, and convenience, contribute to customer satisfaction and engagement. However, there are also limitations and areas for improvement, such as answering complex questions, providing more personalized recommendations, and incorporating human empathy into chatbot interactions.

### **Behavioral Engagement**

Customer engagement, as proposed by Brodie et al. (2011), involves three key components: cognitive, emotional, and behavioral. The cognitive component refers to customers' knowledge and understanding of a company and its products, influencing their buying decisions through informed choices. The emotional component



encompasses customers' affective responses, such as satisfaction and trust, which play a vital role in shaping buying behavior and fostering loyalty. Lastly, the behavioral component includes customers' actions, such as purchasing, recommending, and advocating for a company, indicating higher levels of engagement and influencing others' buying decisions just as this study that revealed the average amount of spending (IDR): The average amount of spending by the informants in this study varied among the participants. Out of the total participants, five informants reported making purchases of less than Rp.500.000 using chatbots, while the remaining five informants reported spending more than Rp.500.000. It is worth noting that one informant stood out, having spent more than Rp.10.000.000 for two separate online purchases using chatbots. This particular informant's high spending demonstrates the potential for chatbots to influence significant transactions and contribute to substantial revenue for e-commerce businesses. This finding emphasizes the importance of chatbots in facilitating and supporting high-value transactions. The variance in spending amounts suggests that chatbots play a role across different customer segments, catering to both lower-value and higher-value purchases. This highlights the versatility of chatbots in accommodating various customer needs and preferences, regardless of the purchase amount.

The informants' spending patterns reflect the impact of chatbots on customer engagement and satisfaction. The informants who made higher-value purchases indicate a higher level of trust and confidence in chatbot-assisted transactions, as they were willing to invest significant amounts of money. This finding suggests that chatbots can effectively foster customer trust and loyalty, leading to increased spending and repeat purchases. However, it is important to note that the study sample size is relatively small, and the spending patterns may not be representative of the larger Gen Z population. Further research with a larger sample size would be beneficial to gain more robust insights into the relationship between chatbots and spending amounts. Nevertheless, based on the available data, it can be inferred that chatbots have the potential to positively influence purchasing behavior across a range of spending amounts. E-commerce businesses can leverage this information to tailor their chatbot strategies and experiences to cater to both lower-value and higher-value transactions, providing personalized assistance and support to enhance customer engagement and satisfaction at any spending level. Based on the data, the Repurchase Intention: A majority of the informants express a positive repurchase intention as a result of their experience with chatbots. The convenience, quick response, and helpfulness of chatbots contribute to building trust and satisfaction, which, in turn, encourages customers to revisit the platform and make additional purchases.

- a. Word-of-Mouth (WOM) Recommendations: The informants mention that they are likely to recommend chatbot-assisted e-commerce platforms to their friends and family. The positive experiences with chatbots, including fast response time and clear information, contribute to generating positive WOM recommendations.
- b. Social Media Engagement: Social media platforms play a significant role in engaging Gen Z customers with chatbots. Informants mention encountering chatbots through social media channels such as Shopee, Tokopedia, and WhatsApp Business in this study. They appreciate the convenience of accessing chatbots directly through these platforms and find it convenient for making inquiries and purchases.
- c. Personalization: The informants express a desire for more personalized experiences with chatbots. They appreciate receiving recommendations based on their preferences and previous interactions. Personalization contributes to a sense of being valued as a customer and enhances the overall engagement.
- d. The preference between chatbots and human customer service representatives is a significant aspect to consider when evaluating the effectiveness of chatbots in e-commerce. The data collected from the informants shed light on their preferences and provide insights into their emotional engagement with both options.

### **Products Purchased**

The study shows that chatbots are mostly used to buy products in various categories. The most popular categories among chatbot users are fashion & beauty products, followed by technology products and educational materials. While the 'other' category accounts for a smaller portion of chatbot purchases, it still maintains a prominent presence. These findings highlight a wide range of products that can be purchased easily using chatbot services, providing users with a streamlined and efficient shopping experience.

### **Behavioral Engagement**

**Amount Spent (Average)** This study examines the expenditure patterns of informants who use chatbots for online purchases. This reveals that there is a mix of conservative shoppers and those showing higher levels of spending. While the majority of participants indicated relatively small amounts of spending, there were some individuals who made significant financial investments in their online shopping activities via chatbots. Further research is needed to understand the underlying factors that contribute to these different spending patterns.

### **Benefits of Chatbots in E-Commerce**

This study highlights some of the advantages of chatbots in e-commerce based on informant responses. Quick or direct response, ease of use, and clear information provided by chatbots are the main benefits appreciated by users. This study also demonstrates the potential for chatbots to offer personalized recommendations, although this aspect is less well known. These findings underscore the value of chatbots in enhancing the customer experience, enhancing support, and streamlining the buying process.

### **Favorite Chatbot Feature**

Analysis shows that quick or instant response is the most valued chatbot feature among informants. The recommendation offers feature comes in second, followed by clear information and ease of use. While most participants appreciated the chatbot's speed and efficiency of response, the chatbot's clear information features and ease of use received relatively few positive reviews. These preferences provide insights for businesses to further optimize their chatbot functionality.

### **Experience Talking to Chatbots as a Gen Z Customer**

Findings reveal positive experiences among informants when interacting with chatbots. They appreciate the quick response, availability of options and product information provided by the chatbot. While there were cases where informants did their own research and found chatbots to be unhelpful, overall, chatbot interactions were found to be useful in product search and purchase processes.

### **Influence on Purchasing Decisions**

The study categorizes the influence of chatbots on purchasing decisions into four parts. While some participants remain unaffected by chatbot interactions, others continue with their original decisions or experience changes in the decision-making process due to chatbot notifications, interactions, errors, or lack of personalized information. In addition, chatbots can increase consumer confidence in certain products. These findings highlight the complex nature of chatbot impact on purchasing decisions and provide insights for businesses to optimize their chatbot strategy.

### **Recommendations Based on Chatbot Interactions**

The study shows that 40% of informants actively recommend chatbots to others based on their positive experiences. They find chatbot interactions influential and useful for making recommendations. However, the majority of informants did not consider chatbot interactions as a determining factor for their recommendations. They believe that other factors, such as the quality of goods or services, play a more significant role. The findings show that there is a split perspective among informants regarding chatbot recommendations.

### **Factors influencing preference**

The informants highlighted various factors that influenced their preference. Those favoring chatbots appreciated the speed, accuracy, and consistency of responses. On the other hand, those favoring human representatives emphasized the importance of emotional connection, empathy, and the ability to handle complex inquiries. These factors reflect the informants' emotional engagement, as they prioritize different aspects based on their individual needs and expectations.

### **Actions Taken as a Result of Chatbot Interactions**

The results show the actions taken by the informant after interacting with the chatbot. While some proceed with predetermined purchases without further involvement with the chatbot, others immediately proceed with the purchase process based on the information provided. The majority seek more information from chatbots or explore other options before making a final decision. Some informants also engage in additional research or seek human assistance after interacting with the chatbot. These findings suggest that chatbot interactions serve as a valuable resource in the decision-making process, but customers still prefer to gather more information and explore alternative options before making a purchase.

### **Improvement Suggestions for Chatbots**

Participants in the study provided suggestions for improving chatbot functionality and user experience. The most common recommendations include increasing personalization by understanding customer preferences

and offering customized recommendations, increasing response accuracy and relevance, expanding product knowledge databases, and enhancing chatbot conversational capabilities to better understand and respond to customer inquiries. This suggestion emphasizes the importance of continuous improvement and development in chatbot technology to meet customer expectations and provide a more satisfying experience.

### **Trust and Privacy Issues**

The analysis also touches on trust and privacy issues in chatbot interactions. Some informants expressed concern about the security of their personal information and transactions when engaging with chatbots. They emphasized the need for clear privacy policies and guarantees regarding data protection. Trust-building measures such as transparency, secure transactions, and clear communication of data handling practices are recommended to address this issue and foster customer trust in chatbot interactions.

### **Hybrid Approach**

Some informants expressed a preference for a hybrid approach, combining the benefits of both chatbots and human representatives. They suggested using chatbots for quick and straightforward queries while involving human representatives for more complex or emotionally sensitive situations. This preference indicates an emotional engagement with a solution that strikes a balance between efficiency and personalized human interaction.

### **Evolution Of Chatbots**

It is worth noting that several informants acknowledged the potential for improvement in chatbot capabilities. They believed that with advancements in natural language processing and artificial intelligence, chatbots could become more sophisticated, empathetic, and capable of handling complex inquiries. This recognition demonstrates an emotional engagement with the future potential of chatbots as customer service representatives. To fully maximize chatbot benefits and increase customer engagement, businesses must integrate chatbots into a comprehensive customer service strategy that combines automation and human support. By gaining an understanding of their customers' specific needs and preferences, businesses can create chatbot interactions that meet customer expectations and contribute to an overall positive experience. Regularly monitoring and improving chatbot performance based on customer feedback can also increase its effectiveness and impact on customer engagement. In conclusion, chatbots have the potential to be a valuable tool for customer engagement in e-commerce, but must be implemented carefully, considering their benefits and limitations. By finding the right balance between automation and human interaction, businesses can develop chatbot experiences that increase overall customer satisfaction, trust, and engagement. The research findings highlight the positive aspects of chatbot interactions, such as quick responses, ease of use, and clear information, while identifying areas for improvement, including personalization and accuracy. Understanding the customer perspective and leveraging this insight can enable businesses to optimize their chatbot strategy, leading to increased customer engagement, better buying processes, and ultimately, success in the ecommerce industry.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusions**

1. This study focuses on Customer Experience and Customer Engagement to see how Gen Z customers view chatbots in e-commerce. These findings illustrate the potential advantages and development opportunities when using chatbots in the e-commerce sector, offering in-depth information about the attitudes and preferences of Gen Z shoppers. In conclusion, for companies that wish to successfully engage with this category of clients, it is critical to understand how Gen Z customers view chatbots in e-commerce. Businesses can use chatbots as an effective tool to improve Customer Experience and Customer Engagement in the e-commerce sector by enhancing chatbot design and functionality, optimizing customer engagement strategies, customizing chatbot interactions, driving trust and transparency, and pursuing future research opportunities.
2. Overall, research shows that the opinions of Gen Z customers about chatbots are conflicting. While they like the ease, quick responses, and 24/7 accessibility that chatbots provide, there are doubts about their ability to understand complex questions and provide customized solutions. Nevertheless, chatbots can be a useful tool for interacting with customers, especially when they show empathy, recognize contextual cues, and provide prompt and correct answers. The research findings suggest that Gen Z customers see chatbots in e-commerce



as a useful resource that enhances their entire customer interaction and experience. Chatbots are seen as practical tools that offer convenience, effectiveness, and instant access to information, increasing client happiness and loyalty. Favorability and influence on consumer behavior suggest a positive relationship between Gen Z customers and chatbots, this can be the answer that chatbots is a friend for the Gen Z customers in terms of their experience and engagement as customers when they are using the chatbots when shopping online in the e-commerce platforms. These findings highlight the importance of chatbots in meeting the growing expectations of Gen Z, who are known for their digital fluency and preference for seamless and personalized interactions. By increasing personalization, enhancing natural language processing, and incorporating multi-channel support, ecommerce businesses can further optimize the chatbot experience for Gen Z customers. Additionally, facilitating seamless human submission when needed and actively seeking customer feedback can ensure that the chatbot is integrated effectively into the customer service ecosystem. It should be noted that perceptions of chatbots can vary based on specific industry contexts, individual preferences, and the quality of chatbot implementation. Further research should explore the different sectors and investigate the nuances of Gen Z perceptions, addressing any concerns or objections they may have regarding the use of chatbots in e-commerce.

3. Ultimately, the positive perception of chatbots among Gen Z customers provides e-commerce businesses with an opportunity to leverage this technology to improve customer experiences, drive engagement, and gain a competitive edge in the market. By continuously adapting to emerging technologies and incorporating customer-centric features, businesses can cultivate long-term relationships with Gen Z customers and stay at the forefront of the evolving e-commerce landscape.

### Recommendations

Based on the findings of this study, the following recommendations are provided for e-commerce businesses and practitioners:

1. **Improve Chatbot Design and Functionality:** To guarantee a flawless Customer Experience, businesses should invest in improving chatbot design and functionality. Enhancing natural language processing capabilities, applying machine learning algorithms to individualized suggestions, and integrating human-like conversational skills can all help achieve this. Chatbot performance should be improved through incremental improvements, user input and ongoing testing.
2. **Optimize Consumer Engagement Strategy:** To increase consumer engagement, e-commerce companies can wisely incorporate chatbots into their customer service plans. This can be achieved by ensuring chatbots provide relevant answers, prompt and correct responses, and actively listen to client inquiries. Businesses should also think about including human assistance as a back-up plan for challenging problems or complex situations.
3. **Tailor Chatbot Interactions:** Chatbot interactions need to be tailored to the specific interests and demands of Gen Z clients. This involves showing empathy, recognizing contextual cues, and making recommendations that are unique to the individual. Businesses can provide more personalized and relevant interactions by exploiting consumer data and investing in sophisticated machine learning capabilities.
4. **Promote Transparency and Trust:** Successful chatbot conversations depend on developing trust. Transparency should be a top priority for ecommerce companies, which must inform customers when they interact with chatbots and explain how data is handled. Building trust can also be facilitated by frequently sharing information about updating and improving the functionality of the chatbot.
5. **Offer seamless human handoff:** Chatbots are efficient at solving common questions, but sometimes human intervention may be required. A seamless customer experience can be maintained by implementing a seamless handover mechanism between the chatbot and human agents to guarantee that difficult or sensitive issues are dealt with quickly.
6. **Include multi-channel support:** Customers in the Gen Z demographic use a variety of communication methods. By integrating chatbot functionality across multiple platforms, including websites, social media, and messaging apps, businesses can provide their clients with a consistent and convenient customer experience while accommodating their preferred method of communication.
7. **Future Research Opportunities:** This study creates new research directions. The significance of trust in chatbot interactions, the influence of chatbot personalities on consumer engagement, and cross-cultural differences in a Gen Z perspective are all areas that merit further investigation. Studies conducted over a long period of time can monitor changes in Gen Z attitudes as technology advances and consumer expectations.

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