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The Role of Artificial Intelligence, Virtual Influencers, and Chat Bots In Improving Generation Z Customer Experience on Social Media Platforms

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Abstract: This study aims to analyze the influence of Artificial Intelligence, virtual influencers, and chat bots on Generation Z customer experience on social media platforms. The research approach used is quantitative with a survey method. Data were collected through online questionnaires distributed to 130 Generation Z respondents in Palopo City and analyzed using multiple linear regression with the help of SPSS version 22. The results of the study indicate that Artificial Intelligence, virtual influencers, and chat bots have a positive and significant effect on customer experience, both partially and simultaneously. Artificial Intelligence and chat bots have a more dominant influence than virtual influencers. These findings indicate that the integration of digital technology plays an important role in creating a personalized, interactive, and efficient customer experience for Generation Z. This study is expected to provide academic contributions in the development of digital marketing studies and become a practical reference for companies in designing technology-based marketing strategies on social media.

Introduction

Digital transformation in recent years has significantly altered marketing strategies and interaction patterns between companies and customers. Technological advances such as Artificial Intelligence (AI), chatbots, and virtual influencers have transformed social media into not just a social space but also a strategic business platform for building customer engagement. According to (Ilyasa & Muhammad, 2024) , companies are now required to be able to respond to increasingly complex changes in consumer behavior, especially Generation Z, which is known to have a high ability to accept and adapt to digital technology.

Generation Z in Indonesia plays a crucial role in the digital consumption ecosystem due to their characteristics, which prioritize speed, personalization, and interactivity in services. The use of AI in digital marketing strategies has been proven to help companies understand

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consumer behavior and create more relevant experiences. Research (Simanjuntak & Chaniago, 2025) shows that the application of intelligent technology in advertising personalization can increase promotional effectiveness while building emotional connection with young customers. This underscores the importance of AI-based innovation in creating a more enjoyable and efficient customer experience.

Furthermore, the implementation of AI-based chatbots is a crucial innovation in strengthening customer relationships. Researchers (Devica, 2024) found that the quality of chatbot responses positively impacted customer satisfaction and trust in online food service platforms. This finding is reinforced by research (Evitasari et al., 2025) , which revealed that chatbots in digital financial applications can increase user loyalty by providing fast and responsive service. Meanwhile, the emergence of virtual influencers is also a new phenomenon in digital marketing because they can influence audience perceptions and trust in a brand.

However, most previous studies still focus on one dimension of specific digital technology, such as the effectiveness of chatbots or AI-based ad personalization, without looking at its comprehensive relationship to customer experience. Research (Rahayu & Faulina, 2022) on OVO users shows that digital customer experience has a positive impact on satisfaction and also increases customer interest. This emphasizes the importance of designing a good customer experience by utilizing digital technology, such as AI, virtual influencers, and chatbots on social media, while (Simanjuntak & Chaniago, 2025) researched ad personalization without linking it to the complete customer experience. This condition shows a research gap in understanding how AI, chatbots, and virtual influencers can work synergistically to improve customer experience, especially among Generation Z in Indonesia.

Based on the problems contained in this study, the purpose of the study is to analyze the role of Artificial Intelligence (AI), virtual influencers, and chatbots in improving user experience on social media platforms for Generation Z. This study seeks to present a new perspective in digital marketing studies by integrating three main technologies that influence customer interactions. The results of this study are expected to provide theoretical contributions to the development of literature on digital customer experience, as well as provide practical benefits for companies in designing marketing communication strategies that are more personalized, interactive, and relevant to the characteristics of Generation Z.

Artificial Intelligence (AI) in Social Media Marketing

Artificial Intelligence (AI) is a type of intelligence designed to mimic human thinking by learning and adapting to information. In the context of digital marketing, AI is used to analyze consumer behavior, provide product suggestions, and customize user experiences on social media platforms (Huang & Rust, 2021) . With AI, companies can recognize individual preferences through machine learning algorithms, allowing for real-time tailoring of marketing communications (Narayanan & Kapoor, 2025) . According to (Chatterjee et al., 2023) and (Dwivedi et al., 2021) , the contribution of Artificial Intelligence (AI) to improving consumer experiences includes content personalization, service efficiency, information credibility, behavioral prediction, and interaction automation. AI can tailor recommendations to user interests, accelerate service delivery, present accurate information, predict consumer needs, and automate interactions to make experiences more relevant, fast, and consistent.

AI plays a significant role in creating more meaningful customer experiences by connecting users to automated services such as chatbots and intelligent recommendation systems (Sharma et al., 2023) . According to (Omeish et al., 2024) , the application of AI in

digital customer service can increase loyalty and strengthen the bond between brands and consumers. This is especially important for Generation Z in Indonesia, known as active users of social media with a high preference for fast, personalized, and authentic digital experiences (We Are Social and DataReportal, 2024).

H1: Artificial Intelligence (AI) has a positive and significant influence on Generation Z's customer experience on social media platforms.

Virtual Influencers in Marketing Communications

Virtual influencers are digital characters created using artificial intelligence technology, designed to resemble humans and interact with users on social media platforms (Jayasingh et al., 2025) . These characters are developed to promote products, enhance brand image, and build emotional connections with their followers (Yu et al., 2024) .

Virtual influencers have been shown to increase engagement, especially among Generation Z, as they are seen as new, modern, and in line with technological advancements. Examples include Lil Miquela from the United States or Imma from Japan. They each have their own Instagram accounts, post images, and even collaborate with major brands. According to (Davlembayeva, 2024) , factors such as visual appeal, active involvement, trust, and uniqueness of the story play a role in increasing audience engagement and strengthening the desire to buy.

In addition, research conducted by (Liu & Chen, 2025) revealed that Virtual Influencers with realistic appearances are more effective in influencing consumer purchase intentions when compared to human individuals. Therefore, the use of Virtual Influencers is a powerful strategy to improve customer interaction and experience on social media. Based on (Appel et al., 2020) Virtual Influencers in improving the Generation Z customer experience include credibility, authenticity, visual appeal, interactivity, brand fit, and engagement levels. Virtual Influencers who are trusted, appear authentic, visually appealing, actively interact, align with the brand image, and are able to drive high engagement will be more effective in creating a positive experience for Generation Z.

H2: Virtual Influencers have a positive and significant influence on Generation Z customer experience on social media platforms.

Chat Bots and Customer Interaction

Chatbots are AI-based applications that enable companies to automatically communicate with customers via text or voice messages. This technology provides 24/7 customer service with fast, efficient, and personalized responses (Sidlauskiene et al., 2023) .

According to (Vergaray et al., 2023) chatbots can increase customer loyalty through three quality aspects: system quality (ease of use, speed), information quality (accurate and relevant answers), and service quality (friendly and responsive attitude). When these three elements are met, customers will feel satisfied because their information needs can be met quickly, and this satisfaction becomes the basis for brand loyalty. Research (Cheng et al., 2022) revealed that the clarity of a chatbot's identity and empathy in communication have a positive impact on user satisfaction and trust. Chatbots can create a more responsive and relevant service experience, reflecting the characteristics of Generation Z, who prioritize speed, convenience, and digital engagement in every interaction with a brand.

Referring to (Hill et al., 2015) , chatbots that influence customer experience include responsiveness, communication clarity, problem-solving ability, human-likeness, and user satisfaction. Chatbots that are able to respond quickly, communicate clearly, help resolve

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problems, interact naturally like humans, and provide a sense of satisfaction will create a more positive experience for customers, especially for Generation Z who value speed and efficient interactions.

H3: Chat Bots have a positive and significant impact on Generation Z customer experience on social media platforms.

Customer Experience (Customer Experience)

Customer experience encompasses all customer views and emotional reactions to every interaction with a company (Lemon & Verhoef, 2016) . Generation Z is known as a group of consumers seeking fast, easy-to-understand, and personalized digital experiences (Priporas et al., 2017) . According to (Pebrianti et al., 2025) the application of AI and Chat Bots electronic loyalty on e-commerce platforms by providing an interactive, easy, and efficient experience. Thus, the application of AI, Virtual Influencers, and Chat Bots can be an integrated approach strategy to create the best customer experience on social media platforms.

According to (Ilyasa & Muhammad, 2024) and (Saputra et al., 2024) , customer experience encompasses all customer views and emotional reactions to every relationship with a company or brand. In the context of Generation Z, known as the generation born in the digital era, the quality of consumer experience is greatly influenced by fast, easy-to-understand, and personalized technological interactions. The use of technologies such as Artificial Intelligence (AI), Virtual Influencers, and Chat Bots can increase customer loyalty and satisfaction through efficient and interactive services on digital platforms. The integration of these three technologies is an effective strategy in delivering a superior customer experience for Generation Z on social media platforms.

H4 : The three independent variables Artificial Intelligence, Virtual Influencers, and Chat Bots have a positive and significant influence on Generation Z customer experience on social media platforms.

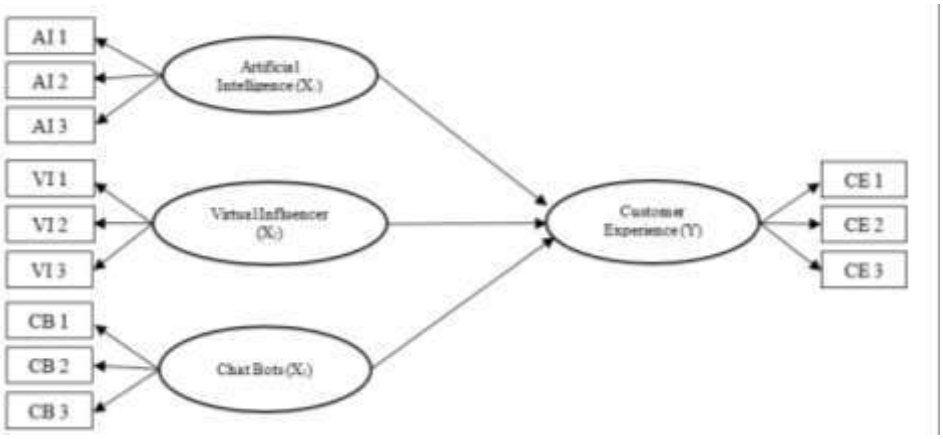

Figure 1. Conceptual SEQ GAMBAR_1 * ARABIC Framework

Research Methods

Population and Sample

This study uses a quantitative approach. The population in this study is all Generation Z born between 1997–2012 (aged 13–28 years in 2025) and social media users who have interacted with Artificial Intelligence (AI), Virtual Influencers, and Chat Bots on various social media platforms such as Instagram, TikTok, and WhatsApp in Palopo City. Because the actual population size cannot be known with certainty, the determination of the sample size is based on considerations of the minimum sample size, which is ten times the number of

measurement items used in the study (Hair et al., 2017). This study used 12 measurement indicators, resulting in a minimum sample size of (10 x 12 = 120). Therefore, the minimum sample size required for this study was 120. A total of 130 questionnaires were returned, thus exceeding the minimum limit.

Data collection technique

The data collection method in this study was carried out through the distribution of an online questionnaire using Google Forms. The questionnaire was compiled based on indicators for each research variable, consisting of four main variables: Artificial Intelligence, Virtual Influencers, Chat Bots, and Customer Experience. Each variable was measured using several indicators developed from previous literature. The questionnaire was compiled using a five-point Likert scale, with the following categories: 1) = strongly disagree, 2) = disagree, 3) = somewhat disagree, 4) = agree, and 5) = strongly agree.

Analysis Method

Before conducting the hypothesis testing stage, it is important to test the quality of the research statement items. This stage is carried out to ensure the quality of all statement items used in this study, then validity and reliability tests are carried out. To conduct validity testing, the Pearson Product Moment correlation method is used which compares the score of each item with an overall score of 5% (0.05) . Furthermore, the reliability test is carried out using Cronbach's Alpha, with a minimum reliability value limit of 0.6. To test the research hypothesis, multiple linear regression analysis is used with the help of SPSS version 22 software. This analysis aims to measure the magnitude of the influence of independent variables on the dependent variable simultaneously or partially.

Variable Measurement Indicators

The following presents the definitions and indicators for each variable used in this study.

Table 3.1 Variable Measurement Indicators

Variables	Indicator	Item	Source
Artificial Intelligence (AI)	AI understands user needs and behavior on social media	AI1	(Saputra et al., 2024) ; (Huang & Rust, 2021)
	AI provides relevant recommendations and personalized content for users.	AI2	(Haidar et al., 2023) ; (Chatterjee et al., 2023)
	AI increases the efficiency and convenience of user interactions on social media platforms.	AI3	(Miftahurrohman et al., 2024) ; (Davenport et al., 2020)
Virtual Influencer (VI)	Visual appeal and persona of virtual influencers	VI1	(Jayasingh et al., 2025) ; (Yu et al., 2024)
	The credibility (trustworthiness and expertise) of virtual influencers in the eyes of users	VI2	(Davlembayeva, 2024) ; (Liu & Chen, 2025)
	Consistency of values, image and messages conveyed by virtual influencers	VI3	(Yustiawan & Lestari, 2023) ;

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Variables	Indicator	Item	Source
			(Ameen et al., 2024)
Chat Bots (CB)	Ease of use and interaction with the chatbot	CB1	(Sidlauskiene et al., 2023) ; (Vergaray et al., 2023)
	Speed and accuracy of chatbot response to users	CB2	(Haidar et al., 2023) ; (Gnewuch et al., 2018)
	The reliability of chatbots in helping solve customer problems	CB3	(Cheng et al., 2022) ; (Hill et al., 2015)
Customer Experience (Customer Experience / CE)	Convenience in interacting with brands through social media	CE1	(Pebrianti et al., 2025) ; (Lemon & Verhoef, 2016)
	Customer satisfaction with AI-based digital interactions, virtual influencers, and chatbots	CE2	(Riu Isma, 2025) ; (Priporas et al., 2017)
	Emotional engagement and customer loyalty towards brands on social media	CE3	Saputra et al. (2023); (Ilyasa & Muhammad, 2024)

Results and Discussion

Validity Test

Validity testing was conducted to ensure that each item in the questionnaire accurately measured the intended variable. Validity was tested using the Pearson Product Moment correlation by comparing the calculated r value with the table r value of 0.149 at a 5% significance level. An item is declared valid if the calculated r value is greater than the table r value and the Sig value is less than 0.05.

Table 4.2 Validity Test Results

Variables	Item	r count	r table	Sig. (2-tailed)	Information
Artificial Intelligence (X1)	X1.1	0.807	0.149	0.000	Valid
	X1.2	0.811	0.149	0.000	Valid
	X1.3	0.446	0.149	0.000	Valid
	X1.4	0.499	0.149	0.000	Valid
	X1.5	0.715	0.149	0.000	Valid
	X1.6	0.740	0.149	0.000	Valid
	X1.7	0.716	0.149	0.000	Valid
Virtual Influencer (X2)	X2.1	0.707	0.149	0.000	Valid
	X2.2	0.589	0.149	0.000	Valid
	X2.3	0.631	0.149	0.000	Valid
	X2.4	0.783	0.149	0.000	Valid
	X2.5	0.780	0.149	0.000	Valid
	X2.6	0.762	0.149	0.000	Valid
	X2.7	0.763	0.149	0.000	Valid
ChatBots (X3)	X3.1	0.693	0.149	0.000	Valid

Variables	Item	r count	r table	Sig. (2-tailed)	Information
	X3.2	0.779	0.149	0.000	Valid
	X3.3	0.789	0.149	0.000	Valid
	X3.4	0.829	0.149	0.000	Valid
	X3.5	0.756	0.149	0.000	Valid
	X3.6	0.796	0.149	0.000	Valid
	X3.7	0.748	0.149	0.000	Valid
	X3.8	0.796	0.149	0.000	Valid
Customer Experience (Y)	Y1	0.919	0.149	0.000	Valid
	Y2	0.926	0.149	0.000	Valid
	Y3	0.943	0.149	0.000	Valid

Based on the validity test results in Table 1, all items in the variables Artificial Intelligence (X1), Virtual Influencer (X2), Chat Bots (X3), and Customer Experience (Y) showed a calculated r value greater than the table r and had a significance value (Sig. 2-tailed) <0.05. This finding indicates that each statement item is declared valid and is able to measure the construct of the variables studied appropriately. Thus, all instruments in the four variables are suitable for use in the further research analysis process because they have met the required validity criteria.

Reliability Test

Reliability testing is conducted to measure the internal consistency of the items in the instrument. Reliability is assessed using the Cronbach's Alpha index. A variable is considered reliable if its Cronbach's Alpha value is greater than 0.70, indicating a good level of reliability.

Table 4.3 Reliability Test Results

Variables	Cronbach's Alpha	Condition	Information
X1 Artificial Intelligence	0.885	>0.70	Reliable
X2 Virtual Influencer	0.895	>0.70	Reliable
X3 Chat Bots	0.929	>0.70	Reliable
Y Customer Experience	0.87	>0.70	Reliable

Based on the reliability test results in Table 2, all variables, including Artificial Intelligence (X1), Virtual Influencers (X2), Chat Bots (X3), and Customer Experience (Y), had Cronbach's Alpha values above 0.70. This value indicates that each variable meets reliability criteria and is stated to have a high level of internal consistency. Thus, all research instruments are declared reliable and suitable for use in further statistical testing because they are able to provide stable and consistent measurement results.

Results of Multiple Linear Regression Analysis

Multiple linear regression analysis was used to determine the effect of Artificial Intelligence (X1), Virtual Influencers (X2), and Chat Bots (X3) on Customer Experience (Y). Based on the results of the regression calculations, the following equation was obtained:

$$Y = 0.638 + 0.322X1 + 0.234X2 + 0.310X3 + e$$

The regression results show that the three independent variables have a positive and significant influence on Customer Experience. Artificial Intelligence (X1) has a coefficient of

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0.322, which means that every increase in AI will increase Customer Experience by 0.322. This shows that AI has the greatest influence because it is able to provide fast, personalized services that suit user needs. Next, Virtual Influencer (X2) has a coefficient of 0.234, which means that every increase in Virtual Influencer will increase Customer Experience by 0.234. The influence is positive, but the smallest because it plays a greater role in attracting attention through visual displays and emotional interactions., and Chat Bots (X3) has a coefficient of 0.310, which means that every increase in Chat Bots will increase Customer Experience by 0.310. This shows that chatbots play an important role in providing fast responses and helping customers directly.

These findings indicate that the more optimal the use of Artificial Intelligence, the more effective the Chat Bots service, and the more attractive and credible the presence of Virtual Influencers, the higher the level of Customer Experience felt by Generation Z. Thus, Artificial Intelligence is the most influential element in shaping customer experience compared to the other two variables.

t-test (Partial Test)

The t-test is used to determine the partial effect of each independent variable on the dependent variable. The test criteria are: if the Sig value is <0.05, then the independent variable has a significant effect on the dependent variable. Furthermore, the regression coefficient (B) indicates the direction and magnitude of the variable's influence.

Table 4.4 t-Test Results

Coefficients [a]

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	0.638	0.220		2,898	0.004
Artificial Intelligence (X1)	0.322	0.103	0.314	3.114	0.002
Virtual Influencer (X2)	0.234	0.106	0.235	2,204	0.029
Chat Bots (X3)	0.310	0.091	0.320	3,388	0.001

a. Dependent Variable: Customer Experience (Y)

Based on the t-test results in Table 3 , the Artificial Intelligence variable has a significance value of 0.002 < 0.05 and a coefficient of 0.322. This indicates that Artificial Intelligence has a positive and significant effect on Customer Experience. This means that the better the use of AI, the better the customer experience will be. AI is an important variable because it is able to provide fast, personalized, and tailored services to user needs. The Virtual Influencer variable has a significance value of 0.029 < 0.05 with a coefficient of 0.234. Thus, Virtual Influencers have a positive and significant effect on Customer Experience. This means that the more attractive and credible the virtual influencer, the better the customer experience will be. However, its influence is smaller compared to other variables. The Chat Bots variable has a significance value of 0.001 < 0.05 with a coefficient of 0.310. This indicates that Chat Bots have a positive and significant effect on Customer Experience. This means that the faster and more responsive the chatbot is in serving customers, the better the customer experience will be. Based on the t-test results, all variables (Artificial Intelligence, Virtual Influencers, and Chat Bots) were proven to have a positive and significant effect on Customer Experience

because all significance values were <0.05. The most dominant variable was Artificial Intelligence, followed by Chat Bots, and finally, Virtual Influencers.

F Test (Simultaneous)

The F-test is used to test whether all independent variables together have a significant effect on the dependent variable. The test criterion is Sig < 0.05, which indicates that the regression model is suitable for use.

Table 4.5 F Test Results

ANOVA [a]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	37,336	3	12,445	81,352	0.000
Residual	19,276	126	0.153		
Total	56,612	129			

Based on the F-test results in Table 4 , the F-value was 81.352 with a significance level of 0.000 < 0.05. This indicates that Artificial Intelligence, Virtual Influencers, and Chat Bots simultaneously have a significant effect on Customer Experience. Thus, the regression model used in this study is suitable *for* further analysis.

Coefficient of Determination (R^2)

The coefficient of determination is used to determine how well the independent variable explains the dependent variable. The R^2 value ranges from 0 to 1. The higher the value, the better the model's ability to explain the variation in the dependent variable .

Table 4.6 Coefficient of Determination (R^2)

Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.812	0.660	0.651	0.39113

a. Predictors: (Constant), Artificial Intelligence (X1), Virtual Influencers (X2), Chat Bots (X3)

Based on the results of the regression analysis in Table 5 , the coefficient of determination (R Square) was obtained as 0.660. This indicates that 66.0% Variations in Generation Z's Customer Experience on social media platforms can be explained by Artificial Intelligence, Virtual Influencers, and Chat Bots. Meanwhile, the remaining 34.0% is influenced by other variables outside the research model, such as product quality, brand image, app usability, and user psychological factors not examined in this study.

Furthermore, the Adjusted R Square value of 0.651 indicates that the regression model used has a good level of accuracy and is able to provide stable estimates in explaining the relationship between variables. This value also indicates that the three independent variables have a strong contribution in shaping customer experience, so that the research model can be categorized as quite good (good model fit) in explaining the Customer Experience phenomenon in Generation Z.

Thus, it can be concluded that Artificial Intelligence, Virtual Influencers, and Chat Bots partially and simultaneously have a significant influence on Customer Experience in Generation Z social media users.

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Discussion

The results of this study indicate that Artificial Intelligence, Virtual Influencers, and Chat Bots have a positive and significant influence on Customer Experience among Generation Z social media users. This finding is supported by the simultaneous test results with an F-value of 81.352 and a significance level of 0.000 (<0.05), indicating that the research model is feasible to use. This finding confirms that customer experience in the digital era is no longer formed passively, but rather through active interaction between users and the intelligent technology used by the platform. The dominance of respondents from the 18–22 age group strengthens the relevance of the research results because this group is the main representative of Generation Z, who have high levels of digital literacy and high expectations for the quality of digital services. Intensive exposure to social media makes this generation highly sensitive to response speed, content personalization, and the quality of the interactions they receive. Therefore, customer experience is not only assessed from the products or information displayed, but also from how technology is able to deliver efficient and relevant interactions. This finding is in line with the views of Rahayu and Faulina (2022) who stated that a positive digital experience is a major factor in shaping user satisfaction and loyalty. Thus, the results of this study confirm that Generation Z Customer Experience is highly influenced by the quality of digital technology integration used in social media platforms, where the three variables are able to explain 66% of the variation in Customer Experience (R^2 = 0.660).

The Influence of Artificial Intelligence on Generation Z Customer Experience

The results of the study indicate that Artificial Intelligence has a positive and significant effect on Generation Z customer experience on social media platforms. This is indicated by a regression coefficient value of 0.322, a t-value of 3.114, with a significance level of 0.002 (<0.05). These findings indicate that the use of AI technology can improve the quality of customer experience through content personalization, relevant recommendations, and the efficiency of digital interactions. Generation Z as active social media users have high expectations for fast, personalized, and adaptive services, so the presence of AI is an important factor in shaping a positive digital experience. The better the AI's ability to understand user behavior and needs, the higher the level of comfort and satisfaction felt by customers.

The results of this study align with the findings of Huang and Rust (2021) and Dwivedi et al. (2021), who stated that AI plays a crucial role in improving customer experience through service automation and interaction personalization. Research by Simanjuntak and Chaniago (2025) also found that the application of AI in digital advertising personalization can increase engagement with young consumers. Thus, these research findings reinforce the view that Artificial Intelligence functions not only as a marketing support tool but also as a strategic element in creating superior customer experiences in the digital era.

The Influence of Virtual Influencers on Generation Z Customer Experience

The results of the study indicate that virtual influencers have a positive and significant impact on Generation Z's customer experience on social media platforms. This is evidenced by a regression coefficient of 0.234, a t-value of 2.204, and a significance level of 0.029 (<0.05). These findings indicate that the presence of virtual influencers can provide an engaging emotional and visual experience for social media users. Generation Z tends to be attracted to creative, unique, and innovative content, so virtual influencers can be an effective tool in

building engagement and positive perceptions of a brand. The visual appeal, message consistency, and persona built by virtual influencers also influence the overall customer experience.

These results align with research by Davlembayeva (2024) and Yu et al. (2024), which found that virtual influencers can increase audience engagement and interest in brands. Liu and Chen's (2025) research also showed that virtual influencers with realistic appearances can positively influence consumer attitudes. However, the contribution of virtual influencers in this study was relatively smaller compared to Artificial Intelligence and Chatbots, indicating that Generation Z still prioritizes the functional aspects of services over purely visual aspects when assessing customer experiences.

The Influence of Chat Bots on Generation Z Customer Experience

The results of the study indicate that chatbots have a positive and significant impact on Generation Z's customer experience on social media platforms. This finding is indicated by a regression coefficient value of 0.310, a t-value of 3.388 with a significance level of 0.001 (<0.05). This finding confirms that the quality of digital services, especially the speed and accuracy of chatbot responses, is an important factor in shaping customer experience. Generation Z is known to prioritize practicality and speed in obtaining information, so responsive and easy-to-use chatbots can increase user comfort and satisfaction. Chatbots also act as a direct representation of the quality of service provided by a platform or brand.

The results of this study align with the findings of Devica (2024) and Evitasari et al. (2025), who stated that chatbots significantly influence customer satisfaction and trust. Research by Cheng et al. (2022) and Vergaray et al. (2023) also emphasized that the clarity of information and the chatbot's ability to resolve customer issues are key determinants of digital experience. Thus, the results of this study confirm that chatbots function not only as a service automation tool but also as a strategic factor in improving the customer experience of Generation Z.

The Simultaneous Impact of Artificial Intelligence, Virtual Influencers, and Chat Bots on Customer Experience

The results of the simultaneous research indicate that Artificial Intelligence, Virtual Influencers, and Chat Bots simultaneously have a positive and significant influence on Generation Z Customer Experience on social media platforms. This is evidenced by the F value of 81.352 with a significance level of 0.000 (<0.05), which indicates that the research model has a high level of feasibility for use in explaining the relationship between variables.

In addition, the coefficient of determination (R Square) value of 0.660 indicates that 66% of the variation in Generation Z Customer Experience can be explained by the three independent variables in this study. Meanwhile, the remaining 34.0% is influenced by other variables outside the research model, such as product quality, brand image, ease of use of the application, and user psychological factors that were not examined in this study. The high value of the coefficient of determination indicates that most of Generation Z customer experience is influenced by the use of digital technology. This finding confirms that Generation Z as digital natives have high expectations for fast, responsive, personalized, and interactive services.

These results align with research by Rahayu and Faulina (2022), which states that digital customer experiences are influenced by various integrated technological elements. Unlike previous research, which generally examined one technology in isolation, this study

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emphasizes the importance of a holistic approach in designing customer experience strategies. Therefore, the integration of Artificial Intelligence, virtual influencers, and chatbots is an effective strategy for creating a more personalized, interactive, and relevant customer experience for Generation Z in the digital era.

Conclusion

Based on the research results and discussion, it can be concluded that Artificial Intelligence, virtual influencers, and chat bots have a positive and significant influence on Generation Z customer experience on social media platforms. Partially, Artificial Intelligence and chat bots have a more dominant influence than virtual influencers, which indicates that Generation Z prioritizes service personalization, response speed, and ease of interaction in digital experiences. Simultaneously, these three variables are able to explain most of the variation in customer experience, thus emphasizing the importance of integrating digital technology in social media marketing strategies. These findings indicate that the integrated application of intelligent technology can increase satisfaction, engagement, and loyalty of Generation Z customers. Therefore, companies are advised to optimize the use of Artificial Intelligence, develop responsive chat bots, and utilize virtual influencers strategically to create an effective and sustainable customer experience in the digital era.

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