# Critical Review : Factors Affecting Artificial Intelligence Based Marketing to Consumer Behaviour on Business Platforms

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## Abstract

*This research aims to study the extent of the developing phenomenon related to the use of Artificial Intelligence (AI) technology in marketing using Virtual Influencers (VI). The author carries out a critical literature review of books and several articles from reputable journals, makes a discussion and finally draws conclusions. The results of the literature review show that in the current digital era marketers are required to have high creativity in offering their products to consumers. Consumers showed positive responses to marketing video content that used Virtual Influencers (VI). However, marketing must maintain VI credibility because the trust factor is the main consideration for consumers when making transactions. In this literature review, the author found that consumer interest in Virtual Influencers is due to marketers' creativity and that transactions can occur after there is trust. Therefore, for further research, it is recommended to use trust as a mediating variable between Virtual Influencer and Purchase Intention.*

*Keywords: Artificial Intelligence, Marketing, Consumer Behavior, Business Platform*

## 1. INTRODUCTION

Marketing is the most important part of business. Through marketing, potential consumers can find out about the existence of a product. From time to time, marketing has developed, starting from very simple (traditional) to modern where products and marketing strategies are adapted to consumer needs and desires. Technological developments, especially the internet, have changed the way individuals make transactions. The evolution of digital technology has changed consumer behavior in the digital economy to a significant concern (Kalashnikova et al., 2023). The evolution of marketing in the digital era began with online marketing where business people offered their products via email and websites. Then marketing developed towards marketing via social media such as Facebook, Instagram, Twitter, YouTube and TikTok. Next, marketers introduce their products through video content and

develop further with marketing that offers memorable experiences through interactive applications, events, and so on. Consumers utilize the Internet to gather information about products and services, with online reviews, social media comments, and other online content influencing their decisions (Ebrahimi et al., 2023).

Currently, Artificial Intelligence (AI) technology has developed. This technology can help business people market their products efficiently and effectively. Technology in AI can replace the duties of a staff/employee so that it can save marketing operational costs and increase profits. Artificial Intelligence Marketing is a method in marketing that uses concepts with artificial intelligence models such as machine learning to reach customers to achieve marketing goals. The content produced by Virtual Influencers is very much sophisticated, which differentiates these characters from other AI-based technologies such as chatbots or virtual assistants that are programmed to answer questions according to scripts (Tsai et al., 2021). In the ever-evolving social media influencer landscape, Virtual Influencers (VI) are becoming increasingly popular. A VI can be a human-like entity or not that is controlled autonomously by artificial intelligence and visually represented as interactive, real-time rendering in a digital environment (Sands et al., 2022).

## 2. LITERATURE REVIEW
### 2.1 Types and Functions of Artificial Intelligence in E-Commerce
There are several main applications of Artificial Intelligence that are often used in E-Commerce (Song et al., 2019)
1) Artificial Intelligence Assistant/chatbots (Artificial Intelligence Assistant)

An artificial intelligence assistant (chatbot) whose main function is to automatically respond to customer questions, respond to simple voice commands and provide product recommendations using a natural language processing system. Chat dialogs on e-commerce sites and mobile pages are based on machine learning algorithms programmed to communicate with customers on a personalized basis.

2) Recommendation Engine

The recommendation engine is a complete recommendation system based on a machine learning algorithm framework. Using AI algorithms can realize deep learning, statistical programming, prediction and analysis of customer behavior, huge data sets, and predicting which products are likely to attract customers. First, based on recent searches by potential customers, the machine learning algorithm in the recommendation engine is able to record important details of the product being searched for based on the calculation results. The recommendation engine then generates appropriate Suggestions for the browser and lists them on the personal page, which ultimately helps consumers find the product by fast.

3) Smart Logistics

Intelligent logistics refers to a logistics development mode in which equipment and controls are made intelligent by using information technology, so as to replace humans with technical equipment. Compared with traditional logistics modes, intelligent logistics can greatly improve service quality and operation efficiency. The Smart Logistics concept was first put forward by IBM in 2009.

4) Optimal Pricing

The e-commerce industry is currently booming, Even for online retailers with small inventories, this kind of sustainable price adjustment in the long term is a big challenge. Artificial intelligence technology, which can process big data quickly, has essentially solved the problem of automatically pricing a large number of products.

2.2 Three Dimensions of Artificial Intelligence (AI)
The book Marketing Artificial Intelligence (Simarmata et al., 2023) explains that there are three dimensions of AI, namely as follows:
1) Level of Intelligence

Davenport, et al. (2020) explained that there are two different things at the level of AI intelligence, namely task automation and context awareness. Task automation is the implementation of tasks in AI that are standardized or based on standard rules, which require consistency (Huang & Rust, 2018). One example of task automation is the application of AI to IBM's deep blue, where standardized rules and "brute force" algorithms are applied to beat human chess players.

2)Task Type

In this dimension, task type refers to AI applications that analyze data in the form of numbers (numerical) versus non-numerical data (such as text, sound, images, or facial expressions). All types of data presented can provide input in decision making. Many companies have implemented AI and categorized data in various formats, whether in list form (tabular) or not. For example, the Stitch Fix company takes data from customers in the form of questions regarding their preferences for products (where the data is entered in tabular form), considering that customers are not always able to articulate their preferences on a scale. numeric.

3) Application of AI to Robots

Most AI applications are in virtual form, for example by using digital platforms and smartphones, which are widely adopted by many companies. However, AI applications can also take the form of entities such as robots. Like the Tipsy Robot (robot barista) in Las Vegas, which is between virtual and reality. Where the robot is only able to operate on a limited scope and tasks.

**2.3 The Role of Artificial Intelligence (AI) in Improving Marketing Mix Activities**

Several marketing activities that can be carried out in relation to the marketing mix according to (Sanjeev, et al., 2021) are as follows:
1) The existence of AI can help marketers with marketing strategy and planning, namely by carrying out segmentation, targeting and positioning (STP) which is strategically oriented towards the company's vision (Huang & Rust, 2017); (Shangkar, 2018). By utilizing data mining and machine learning algorithms in AI, marketers are able to implement marketing strategies and plans that are more focused and segmented on the potential customers they are targeting.

2)The Role of AI in Product Management
In product management, the use of AI (artificial intelligence) in marketing analysis tools is able to identify and measure the suitability of product designs required by customers and is able to provide satisfactory results for customers (Dekimpe, 2020).

3) The Role of AI in Price Management
Determining a price for a product is not an easy thing for a marketer. Apart from the many factors that must be considered in determining a price, marketers must also pay attention to price variations which must be adjusted to fluctuating customer demand. For this reason, algorithms based on AI or artificial intelligence are able to provide solutions for marketers to determine appropriate and dynamic prices in real time. so that it is able to compete with prices offered by competitors (Misra, et al., 2019); (Dekimpe, 2020) also explains that algorithms in artificial intelligence are able to summarize customer choice responses.

4) The Role of AI in Promotion Management
Promotion management is the management of a series of marketing activities that have been planned and prepared by the marketing team. This series of activities consists of planning and

scheduling promotions in the media, as well as product campaigns that will be carried out, optimizing the use of search engines, and so on. The promotional tactics used are now shifting from physical to digital. The existence of global digital transformation has triggered new breakthroughs in digital marketing and product campaigns on various social media platforms, where customers can determine the content, place and time to be used. Here AI (artificial intelligence) plays a role in personalizing and adapting existing messages, according to customer profiles and preferences (Huang & Rust, 2020).

5)The Role of AI in Distribution Management
One important component in the marketing mix to increase customer satisfaction is product access and product availability. Product distribution relies on network relationships, logistics, inventory management, warehousing and transportation, most of which are mechanical and repetitive. Artificial intelligence is the perfect solution in terms of place management by offering cobots for packaging, and the use of drones in delivery (Huang & Rust, 2017).

## 2.4 Consumer Behavior

According to Schiffman and Kanuk (2019) consumer behavior is the behavior shown by consumers in searching for, purchasing, using, evaluating and disposing of products and services that they hope will satisfy their needs. The factors that influence consumer behavior according to Schiffman and Kanuk (2019) are external and internal factors. External factors include culture, social class, and social factors. Internal factors include motivation, perception, learning experiences, personality and self-concept, as well as beliefs and attitudes.

Literature on consumer behavior in the digital era has discussed a variety of topics, including increasing interest in financial needs, consumer independence, the shift from image advertising to product advertising, and increasing interest in the quality of financial product features (Korobov, 2020). The application of Artificial Intelligence (AI) to marketing science plays an important role in understanding the impact of AI on consumer behavior. Due to the evolution of technology consumers are able to search, discover and choose the best solution for their needs. Researchers in this new era are examining how they can increase the number of satisfied users. Large amounts of personalized web data are continuously processed, revealing consumer behavior patterns that enable buyers and customers to experience qualitative experiences (Q. Andre, 2017).

## 2.5 Business Platforms

A business platform is hardware and software, which functions as an organizer in an ecosystem and with network effects, resources, transactions and relationships between individuals and various actors such as consumer-users, professionals, the business world, institutions, business partners, etc. other. To jointly create value. Another unique feature is that in Platform, assets and output value have moved outside the organization and come from the ability to orchestrate interactions among ecosystem actors, requiring new leadership styles, new approaches to storytelling, new business disruption strategies and new service logic, which is always connected with consumers thanks to a device (Harvard Business Review, 2016). A business platform is a business model that creates value by facilitating exchange between two or more interdependent groups, usually consumers and producers. What is included in the business platform is E-Commerce. Several E-Commerce applications in Indonesia include Shoope, Lazada, Tokopedia, Bukalapak, and Blibli.

**Tabel 1: Review of Artificial Intelligence Based Marketing to Consumer Behavior**

| Nu | Authors | Findings |
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| 1 | Song, et al., (2019) | Currently, e-commerce giants are actively implementing and optimizing Artificial Intelligence technology to increase competitiveness. Alibaba, Jingdong and Amazon are launching intelligent service robots. In the logistics sector, e-commerce giants |

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| | | have also launched their own products. In terms of recommendation engines, Alibaba has the Artificial Intelligence visual platform DT PAI, jingdong introduced the zhong kui image information system platform and character recognition system. With the rapid development and continuous progress in research technology, deep learning platforms, voice analysis technology, biometric technology, image recognition technology, video analysis technology, robot automatic processing systems, text analysis, and Natural Language Processing (NLP) and other Artificial Intelligence technologies will continues to develop. Artificial Intelligence techniques are increasingly being applied, having an increasingly greater impact on aspects such as customer retention and customer satisfaction in e-commerce transactions. Over time, AI will become an important driving force for e-commerce transformation. With the support of AI technology, e-commerce will have broader development prospects for the establishment of better customer relationship management and sales promotion. |
| 2 | Davenport (2020) | This research outlines how AI could influence marketing strategies and customer behavior in the future. The main focus is to develop a multidimensional framework for the evolution of AI, taking into account the importance of dimensions related to the level of intelligence, type of task, and whether the AI is embedded in a physical robot. All three dimensions are integrated into a single framework. What is of concern in the research is First, the impact of AI in the short to medium term may be greater. Second, it is suggested that AI will be more effective if applied in ways that augment (not replace) humans. To fully examine the impact of AI, a research agenda that covers three broad areas is recommended: (1) how companies' marketing strategies will change, (2) how customer behavior will change, and (3) issues related to data privacy, bias, and ethics. |
| 3 | Thomas & Fowler (2020) | The results show that AI influencers can generate positive brand benefits similar to the benefits generated by human celebrity endorsers. In addition, just like humans, AI influencers can also commit violations that result in degradation of the brands they support. Importantly, however, AI influencers differ from human celebrity endorsers in that consumers are less likely to perceive them as unique. Therefore, consumers are more likely to perceive violations committed by an AI influencer as behavior that can be applied to all AI influencers, but they are not. It is unlikely to view celebrity endorsement behavior as interchangeable. Therefore, once an AI influencer commits a violation, it replaces the AI influencer with a celebrity endorser to reduce negative brand perception, an effect that cannot be realized if the replacement is another AI influencer. |
| 4 | Longoni (2020) | The findings in this study demonstrate the "word-of-machine" effect, a novel phenomenon in which utilitarian/hedonic attribute trade-offs determine preference or rejection of AI-based recommendations compared to traditional word-of-mouth recommendations. or human-based recommendations. The word-machine effect stems from the common belief that AI recommenders are more competent than human recommenders in utilitarian areas and less competent than human recommenders in hedonic areas. As a consequence, the importance or salience of utilitarian attributes determines the preference of AI recommenders over humans, and the importance or salience of hedonic attributes determines the resistance of AI recommenders over humans. Word-of-machine effects can relate complexity, number of options considered, and transaction costs. The word-of-machine effect is reversed for utilitarian purposes if recommendations need to be tailored to a person's unique preferences. Interventions based on protocol considerations in contrast weakened the word-of-machine effect |

| 5 | Mustak, et al., (2020) | Based on a review of research on Artificial Intelligence, there are ten research themes that stand out, namely as follows: (1) understanding consumer sentiment, (2) AI industry opportunities, (3) analyzing customer satisfaction, (4) electronic word of mouth based insights, ( 5) improving market performance, (6) using AI for brand management, (7) Measuring and increasing customer loyalty and trust, (8) AI and new services, (9) using AI to improve customer relationships, and (10) AI and strategic marketing. Scientometric analysis reveals key concepts, keyword occurrences, authorship networks, top research themes, important publications, and the evolution of the research field over time. |
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| 6 | Yu, et al,. (2021) | Focusing on the application of Artificial Intelligence, this research investigates the impact of emotional displays on user engagement with computer-generated image influencers through the lens of a computer-based social actor framework (CASA). It breaks down emotions into individual muscle movements (i.e. facial action units). Using facial recognition based on 1,028 images shared by Lil Miquela, these findings reveal the importance of happiness, sadness, disgust, and surprise in triggering user engagement when promoting a variety of visually arresting product content. These findings highlight the importance of balancing the intensity of muscle movements to simplify interactions between technology, human behavior and digital communication. |
| 7 | Saygili (2021) | Important categories for the field of artificial intelligence applications in marketing are as follows: Smart Assistants, Recommendation Systems, Customer Segmentation, Purchasing in Program Environment, Predictive analytics (Smart Assays), Advertising and Retargeting, Web and App Personalization, Chatbots, Visual Artificial Intelligence, Visitors Analysis, Customer Experience, Dynamic Pricing. These categories consist of many important applications that make consumers' daily lives easier and have an important function in terms of marketing activity processes for businesses and marketing practitioners. For example, while ease of use is offered to consumers with mobile applications and interfaces such as navigation, virtual assistants with smart assistants, on the other hand, customer segmentation applications provide convenience to businesses by analyzing and synchronizing customer data. What is common is that the aim of the categories and application areas in Artificial Intelligence (AI) is to improve the standards of its users (businesses or consumers) in practical life. |
| 8 | Verma, et al., (2021) | Artificial Intelligence and Machine Learning have played a vital role in big data analytics to anticipate and provide guided experiences to meet customer expectations. AI and predictive analytics are key to offering customer experiences that build lifelong customers. Disruptive technologies such as the internet, big data analytics, blockchain, and artificial intelligence have changed the way businesses operate. Of all the disruptive technologies, artificial intelligence (AI) is the latest technological disruptor and has enormous potential in manufacturing, pharmaceuticals, health, agriculture, logistics and digital marketing. Many practitioners and academics across are trying to find the most suitable AI solutions that their organizations can implement. However, research in this area is still lacking. |
| 9 | Sand, et al., (2022) | The findings show that several previous studies have shown there are both similarities and differences in how consumers view AI and human influencers. The authors found no differences in intent to follow or personalization. This shows that consumers are equally open to following AI, and they understand the level of personalization provided by one such type of influencer. Although an AI influencer is generally considered to have lower source trust, they are more likely to generate intent through word of mouth. The research results show |

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| | | that social distance mediates the relationship between influencer type and influential people. The research results also show that AI influencers can have a greater influence on consumers who have a high need for uniqueness. |
| 10 | Haleem, et al., (2022) | AI refers to techniques that enable machines to perform cognitive functions that require human intelligence. Among them are learning, reasoning, and interacting with the environment around the machine. Machine Learning and Deep Learning are two of the most famous AI techniques. AI can create a more personalized brand experience, thereby cultivating user engagement and loyalty more easily. Marketers use language-based AI as a sales tool, payment processor, and engagement manager to improve user experience. Customers can now rely on chatbots to carry out the purchasing process. Language-based AI can help marketers by identifying relevant content that users want to read. Personalization of content through observation, data collection and analysis can now be done with the help of AI. This technology in digital marketing helps marketers with email campaigns, allowing them to maximize results. Email marketing is a digital marketing service that helps reach target audiences at the right time and ensures relevant conversion strategies. Analyzing data is the most important thing in AI-based marketing. This technology will analyze large amounts of data and provide marketers with information about the facts on the ground. |
| 11 | Ganesh & Kandi (2022) | The rise of artificial intelligence in marketing has far-reaching consequences. The ability to properly integrate and manage AI solutions is becoming increasingly important for marketers as AI continues to advance and gain traction in the industry. Just as important for individuals, the success of companies is an appreciation of their position in the value creation and distribution of AI-enabled processes in the workplace. AI makes it easier for marketers to build and share value at scale with the right people, at the right time, and in the right way, and this has huge benefits for marketers, consumers and society at large. This potential may be achieved through cultivating empathetic and creative thinking among staff and maintaining a data-driven system culture that prioritizes excellence. With the help of AI, marketers can devote more time and resources to initiatives that directly benefit customers, employees, and society as a whole, such as developing new products, fostering a more positive work environment, and encouraging innovative ideas. Marketers' interactions with clients, the strategies and technologies they use, the knowledge and abilities valued in the workplace, and the nature of their daily tasks will all change drastically in the Age of AI Marketing. AI has the potential to transform marketing in ways comparable to those of computers. |
| 12 | Chintalapati & Pandey (2022) | Based on conclusions from previous research, the study categorizes marketing into five different functional themes namely integrated digital marketing, content marketing, experiential marketing, marketing operations, and market research. AI will continue to develop to become smarter to improve human thinking abilities which will ultimately dominate human creativity and thinking abilities. The evolution of AI will increase security concerns. AI's ability to continuously learn and interpret/predict customer purchasing intent and emotions will help channel and focus future marketing efforts, leading to extreme automation and personalization. |
| 13 | Basha, M (2023) | The findings reveal that competitive pressure, media attention, digital maturity, and customers are important influencing variables in incorporating AI into marketing. According to respondents, the use of AI in marketing has increased the effectiveness of the marketing function, better understanding of customer information, more feasible marketing decisions, increased ROI, insight, improved service and customer satisfaction. According to them, AI helps in the development |

| | | of sales and marketing strategies resulting in significant improvements in company performance. AI can change the marketing environment and help modernize outdated marketing strategies. Organizations will experience significant difficulty in adapting to changes in the marketing environment. With the emergence of innovation, the business world must plan for the future and train its personnel continuously. Respondents also felt that having data is very important as this is the most important aspect of AI; as a result, data is also the biggest hurdle. According to respondents, data is the most important factor to consider when dealing with clients. |
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| 14 | Um (2023) | This research finds that social interactions with virtual influencers have a positive effect on attitudes towards virtual influencers. Furthermore, perceived human-likeness, perceived predictability, and perceived authenticity also influence positive attitudes toward virtual influencers. Lastly, research findings show that attitudes towards virtual influencers have a positive impact on attitudes towards advertising. |
| 15 | Bashang & K (2023) | Based on relevant research regarding AI (2017–2023), it shows that the world of digital marketing is changing due to AI, so AI is very important in digital marketing. In this article, the application of AI in digital marketing includes chatbots, automatic content creation, personalized advertising, customer segmentation, targeted marketing campaigns. A key challenge for digital marketers is balancing personalized advertising experiences and respecting user privacy. As AI develops, digital marketers must keep up with the latest developments and successfully utilize AI technology to increase business success. In addition, large financial investments are required to implement AI in digital marketing. Small businesses with limited resources and insufficient funding may find it difficult to implement AI. The absence of rapid adaptation to AI can result in missed opportunities or ineffective strategies necessitating continuous learning and professional development at the digital marketing level. AI has been able to manage several tasks in digital marketing independently. However, human creativity and intuition in creating efficient marketing campaigns are needed. As for the negative impacts, reliance on AI can lead to the erosion of human contact and authenticity. |
| 16 | Guram (2023) | AI can be utilized in marketing. For example, by incorporating AI into programmatic advertising and social media marketing, a more complete picture of consumer behavior, predictive analytics and deeper insights can be achieved. Speeches and conversations on virtual influencers are some examples of innovative new marketing techniques that may benefit both businesses and customers. Utilization of AI can increase efficiency and effectiveness for businesses. Before AI is widely used, there are important concerns that must be addressed, such as its potential impact on job losses. The rapid development of AI in marketing over the last few years means that its use is becoming more widespread. The long-term impact of AI on business is that it requires different skills to succeed, influences the way marketers and brands function, and changes consumer expectations. |
| 17 | Gerlic (2023) | The findings reveal that virtual influencers are preferred over human influencers, and factors such as trustworthiness, reliability, relevance, and expertise contribute significantly to their acceptance and preference. These factors also influence customers' opinions, considerations, and purchase likelihood. Descriptive statistical results show that virtual influencers' trustworthiness and expertise received the highest scores, indicating that customers trust their opinions in their expertise. |
| 18 | Yan (2024) | In the digital era, with the enormous influence of marketing media that spreads messages, consumers find it difficult to distinguish which content can be trusted when making purchasing decisions or seeking |

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| | | purchasing advice from opinion leaders (AI influencers) (Davidaviciene & Palulis, 2019). The credibility of a communicator or message source is an important factor in persuasiveness (Hovland & Weiss, 1951). Therefore, AI influencers' perceived credibility has become important for consumers to mitigate perceived risks in the market purchasing process (Aytuna, 2019). According to research by Hovland and Weiss, Kelman and Hovland (1953); Ohanian (1990), the perceived credibility of AI influencers has three dimensions: attractiveness, trustworthiness, and expertise. |
| 19 | Looi & Kahlor (2024) | The prominence and profitability of influencer marketing has facilitated the proliferation of virtual influencers—fictitious digital personalities created and managed using artificial intelligence. Virtual influencers may offer advertisers greater creative control and greater results than engaging human influencers. Results of 99,680 English language Instagram posts uploaded by 424 human and virtual influencers in the beauty, fashion and lifestyle domains from 2020 to 2022 show that posts from both types of influencers mostly convey positive sentiments. Human influencers engage in active self-promotion, while virtual influencers emphasize their identity. A natural experiment found that human influencers generated greater engagement than virtual influencers. Influencer level also interacts significantly with Instagram verification to influence engagement. |
| 20 | Babu, et al., (2024) | The research found that although AI influencers are less authentic than human influencers, they can still build trust by increasing their credibility through effective promotions and brand alignment. AI influencers can also play a role in shaping consumer behavior. Although consumers may be skeptical at first about AI influencers. Quality might help them win customers' trust. To stand out in the digital marketplace, marketers can leverage the novelty and adaptability of AI influencers to create memorable experiences for customers. Marketers can maximize their use of AI influencers and increase the effectiveness of their campaigns by tailoring messages to suit customer preferences and closely observing consumer reactions. |
| 21 | Igarashi, et al., (2024) | The popularity of Virtual Influencers is increasing on social media. This often occurs due to their stylish appearance, unique personality, interesting background, and biography (Sands, Ferraro, et al., 2022). While Virtual Influencers were created to perform the same function as Human Influencers, namely persuading followers to purchase certain products and services, it is unclear how effective they are compared to Human Influencers specifically in the context of prosocial behavior. Current research finds that Human Influencers are more effective than Virtual Influencers in encouraging prosocial behavior among consumers when they promote prosocial causes independently. This is because consumers see a stronger similarity with the Human Influencer in terms of morals, values, and behavior which in turn increases their perception of authenticity and thus the prosocial nature they are referring to. However, when a Virtual Influencer's brand affiliate stands out, the impact will be huge, making Virtual Influencers as effective as Human Influencers. |
| 22 | Yan, et al., (2024) | This research categorizes Virtual Influencers (VI) into three types (i.e. human-imitating VIs, human-animated VIs, and non-human VIs) and examines how consumers' emotional attachment and profit-seeking behavior varies among them and the mechanisms underlying the effects the. Results showed that human-animated and non-human-animated VIs elicited stronger emotional attachment than human-imitating VIs (Study 1). Additionally, animated human and non-human VIs had greater levels of social presence than human-mimicking VIs (Study 2). Furthermore, social presence partially mediates the relationship between type VI and emotional level attachment. Specifically, social presence mediated the effects of human imitation |

| | | and non-human VI on emotional attachment, but did not mediate the effect of human-animated VI on emotional attachment (Study 3). |
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| 23 | Ramchandran, et al.,(2024) | The research results show that Artificial Intelligence (AI) stimulation tools are better than traditional methods in selecting the right influencer tools, leveraging the community to carry out campaigns, and mastering a good return on investment. AI drives influencer marketing to better enable commerce to produce personalized content and target specific people, thereby increasing brand recognition and getting more people to interact with the brand. Despite problems such as limited access to data and moral concerns, AI is still the main force behind new ideas in influencer marketing. Future trends show greater advances in algorithms and the emergence of virtual leaders, which will change the way brands and customers interact with each other. Using AI influencers in marketing can help businesses adapt to the changing digital world and build real business relationships with the people they want to reach. |
| 24 | Gerrath, et al., (2024) | Findings revealed that participants showed openness towards both Social Media Influencers (SMI) and Virtual Influencers (VI) but there were differences in how the two were evaluated. With respect to SMI humans, participants showed a general hesitancy to trust the motives behind posts. Overall, respondents had an interest and positive acceptance of the same content shared by VI. Initial qualitative studies suggest that users' curiosity and interest in VI can help overcome their reluctance to engage with environmental issues as well as alleviate associated negative emotions. The contrived nature of VIs creates an inconsistency between their lifestyle and their message, resulting in a heightened focus on VIs' pro-environmental messages. |

## 3. RESEARCH METHODS

The author collected information regarding the phenomenon of using Artificial Intelligence (AI) technology by reading several articles from several reputable journals and books about Marketing AI. Next, the author then critically analyzes these publications which are related to the research problem. Through this literature review, it provides a comprehensive description of the issues that are currently developing. This paper contains conceptual categories related to AI for marketing. The author summarizes the findings in the research then discusses them and finally draws conclusions.

## 4. DISCUSSION

The digital era is an era where human life activities are moving towards digital. This is marked by the emergence of the internet, digital mobile phones, mobile data, laptops, and so on. With the emergence of the internet, it has changed the way individuals make transactions, who initially tended to go to shops in person, now prefer to shop online because they are busy and time-consuming. This encourages business platforms to compete to attract the attention of consumers to carry out transactions on their platforms.

As for consumer behavior in the digital era regarding online transactions, they always look at reviews from previous consumers, understand better what their needs and wants are, buy popular/viral products. In the current digital era, it really supports Artificial Intelligence-based marketing because digital technology uses a computerized system that is connected to the internet. Thus, it is an opportunity for marketers to innovate in marketing their products, one of which is through Artificial Intelligence influencers. If previously marketers tended to use celebrities (humans), then with AI technology, marketers can create AI influencers by providing unique characters that can attract consumers' attention. However, you must remain focused on building consumer trust because currently consumers are still confused about which content can be trusted.

The results of a review of 24 studies show that the most important factor for AI influencers is credibility. However, if this AI influencer makes a mistake, marketers can switch to human influencers (celebrities). AI influencers are an adaptation of changes in the digital

world so that they can build businesses and reach a wider market. AI influencers are currently more popular on social media platforms. This is an opportunity for marketers because potential consumers usually have at least one social media account.

## 5.CONCLUSION
In the digital era, marketers are required to be more creative in marketing their products. One of the most popular ways to offer products today is by utilizing Artificial Intelligence (AI) technology, namely using virtual influencers who can replace human functions as salespeople. The most important thing that marketers focus on is how to gain consumer trust in content created using Virtual Influencers (VI).

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