



BEYOND LIKES AND FOLLOWS: HOW AI INFLUENCERS DRIVE REAL SALES FOR INDONESIAN MSMEs

Edy Suandi Hamid¹, Bhenu Artha²

¹Universitas Islam Indonesia, ²University of Widya Mataram

Email: edysuandi@yahoo.com, bhenoz27@gmail.com

ABSTRACT

Micro, Small, and Medium-Sized Enterprises (MSMEs) is a very important industry in Indonesia. MSMEs support large-scale businesses and they are crucial to job creation, poverty alleviation, growth, and social inclusion. The purpose of this study is to determine the influence of ai influencers on digital marketing content and ultimately affect the sales of Indonesian MSMEs. This research uses theoretical literature review as a research method. Authors found that AI influencers affect digital marketing contents, and digital marketing contents affect sales of Indonesian MSMEs. Indonesian MSMEs should use AI influencers to promote their products or services.

Keywords: *Indonesia, MSMEs, sales, AI, influencer*

1. Introduction

Micro, Small, and Medium-Sized Enterprises (MSMEs) are involved in the production, manufacturing, and processing of goods and commodities. Their contributions to the expansion of an entrepreneurial culture, equitable growth, and the decrease of rural-urban inequities are noteworthy. MSMEs support large-scale businesses and they are crucial to job creation, poverty alleviation, growth, and social inclusion in the modern global economy.

The global economy has experienced unparalleled digitalization in the last three decades (Kraus et al., 2022). It has replaced traditional management techniques with technology-mediated ones for managerial and operational responsibilities in enterprises (Aslam et al., 2022; T. Wang, 2021). Either to maintain their competitive position in the market, ensure their survival, or gain market share was the goal (Pizzo et al., 2022). This technological development in business was made possible by the Internet and information technologies (Yuan et al., 2021). Mobile devices with internet connectivity allow users to purchase whenever and wherever it's convenient for them from a huge online market. Nowadays, consumers have access to hundreds of different brands, types, and price points for their purchases. They may now swiftly and remotely compare various things according to their pricing and quality as well. It enables clients to electronically trade products and services at any time, over large distances. Over the past five years, e-commerce has grown significantly and now constitutes a sizable portion of the internet and related technologies (Mishra & Mukherjee, 2019). Its estimated pace of practice is expected to remain the same or increase. Business companies are constantly upgrading their technology, which increases their reliance on intelligent technology such as artificial intelligence and ordinary internet technologies (Sestino & De Mauro, 2021).

Avatars, AI-generated content, and computer-generated universes that foster hitherto unheard-of levels of social connectedness are all products of the rapid growth of artificial intelligence (AI) (Ahn et al., 2022; Miao et al., 2021). This revolutionary technology leads to increased client engagement through extensive and powerful non-human digital

communications that replicate a more realistic experience (Rahman et al., 2023). Despite the uncanny valley effect's unease and eerie effects being a source of criticism for anthropomorphic figures (Lou et al., 2022). One of the things produced by AI is Computer-Generated Imagery (CGI).

CGI influencers, like Lil Miquela and Imma, are an incredible invention that pushes the limits of virtual media by using AI to create digital personas that mimic real people in appearance and behavior (Drenten & Brooks, 2020). Apart from their carefully chosen online persona, CGI influencers possess the ability to convey emotions in a manner that avatars are unable to. CGI influences can replicate the nuances of human expressions with the application of animation and rendering techniques (Ahn et al., 2022). The ability of CGI influencers to reliably portray a wide range of emotions may prove difficult for their human counterparts to match. In addition to (Ekman, 1992) list of the six basic emotions—happiness, sorrow, surprise, fear, anger, and disgust—a more advanced method of evaluating facial expressions involves measuring the movements of the facial muscles using action units (AUs) (Ngan & Yu, 2018).

The rise of virtual influencers on well-known platforms indicates that they have effectively navigated the uncanny valley for a large number of people. Partnerships with giant industries like Calvin Klein, Puma, and Prada demonstrate that, from a marketing viewpoint, working with CGI influencers gives firms increased control and safety over their marketing efforts (Drenten & Brooks, 2020; Sands et al., 2022). While there is disagreement over the morality of computer-generated imagery influencing, computer-generated universes are undoubtedly the future of technology. In order to advance understanding of online influencer marketing (Cheung et al., 2022), marketers are advised to get ready for next-level social, design, and creative experiences in AI, as highlighted by recent studies (Grundner & Neuhofer, 2021). To promote user engagement (Cheung et al., 2022) and, indirectly, enhance parasocial interactions on social media (Mrad et al., 2022), it is crucial to understand how customers respond to CGI influencers (Chuah & Yu, 2021; Lou et al., 2022). CGI influencers can be used by MSMEs, in improving the quality of their marketing content. Indonesian MSMEs need to use CGI influencers, despite using another AI tools, for example chatbots. We use theoretical literature review in this research to determine the influence of AI influencers on MSMEs' sales.

2. Literature Review

2.1 Indonesian MSMEs

Particularly in developing countries—like Indonesia—MSMEs are essential to gross domestic product (GDP) per capita development and generate more jobs than large firms (Reeg, 2015). Known sources of MSME include individual entrepreneurs and family-run or non-family businesses (Memili et al., 2015). In order to grow or survive, these businesses require special operational characteristics and resources. MSMEs in Indonesia can be categorized using either the classifications of Badan Pusat Statistik (BPS), which separates MSMEs according to the number of workers, or Law No. 20/2008, which divides MSMEs according to the value of assets or sales. The author of this study classified small firms with 5–19 employees and medium-sized businesses with 20–99 employees according to the BPS.

2.2 The dynamics of open innovation in MSMEs

According to (Gassmann et al., 2010), open innovation (OI) is the process of using intentional knowledge inflows and outflows to boost internal innovation and widen the markets for innovation's external application. It is built on the idea of organizational boundaries and is adamant about the idea that innovations and industry best practices shouldn't be restricted to a company or sector (Dahlander et al., 2021). Over the past ten years, the body of academic research on OI has increased dramatically (Obradović et al., 2021). But the bulk of research on

OI has focused on large businesses (Barrett et al., 2021), and it has been noted that there is a lack of empirical research on the use of OI in the context of MSMEs (Obradović et al., 2021).

2.3 Challenges and limitations for MSME's digital transformation

Studies reveal that small and medium-sized enterprises lack sufficient expertise about technology. Many MSMEs lack the knowledge necessary to fully utilize the potential of digital transformation technologies. These companies typically don't know much about the advantages of the solutions that are offered (Gams & Kolenik, 2021). Furthermore, due to budgetary limitations, MSMEs have restricted access to outside consultants (Akpan et al., 2020), which intensifies the scarcity of more experienced information technology (IT) specialists who can get greater value from more sophisticated digital transformation instruments (X. Song et al., 2019), such big data and machine learning. SME's have lagged behind in the digital transformation process and, as a result, in gaining subject-matter expertise, even with the initial and more basic stages of digitalization (T. Wang, 2021). The availability, benefits, and successful integration of digital technology with business models and procedures are some of the obstacles that have been noted in the literature (Shamsi et al., 2022). Furthermore, internet platforms might not give user businesses easy access to customer data, which would restrict their comprehension of the clientele (Piccialli et al., 2021).

Digital marketing use to promote goods and services (Mehta & Kaye, 2021). MSME's are unable to use digital marketing platforms or engage in e-commerce due to a supply-demand imbalance (Al-Emran & Granić, 2021). As a result, it is critical to spread the word about how important it is to use technology for marketing and to appreciate the opportunities it offers (Al-Nuaimi et al., 2022). However, because of their smaller networks, decreased ability to find and access talent, and generally worse working conditions, MSME's have a harder time recruiting and keeping qualified workers than do major corporations (Shamsi et al., 2022). Due to their smaller workforces and inability to release employees for training, MSMEs also incur higher costs for customized training (Shamsi et al., 2022).

2.4 Digitalization's benefits for MSMEs

Technology is used by a variety of marketing initiatives in both small and large sectors to further their development (Sembiring et al., 2022), including MSMEs. In order to promote economic growth and the quickly accelerating globalization of society, MSMEs must be digitally transformed and restructured (Grewal et al., 2021). This will foster innovation and ensure the long-term commercial sustainability of MSMEs. Additionally, digitalization offers a number of prospects for greater integration into international markets, interactivity, and sustainable growth of MSME's (Piccialli et al., 2021). Digitalization has the potential to reduce expenses, save time and resources, and be especially beneficial for smaller enterprises with weaker internal resources and less market and bargaining power to handle complex business environments (Piccialli et al., 2021).

2.5 Artificial Intelligence (AI)

Artificial Intelligence (AI) is a relatively new technology that has enormous applicability across a range of fields (Ahmad et al., 2021, 2022; Kolotylo-Kulkarni et al., 2021) and aims to increase human intelligence or work capacity. AI is a technical phrase that evaluates and realizes a human's regular mental process through intellectual development and stimulation (Ahmad et al., 2022). The foundation of AI technology is made up of algorithms that mimic the functions of the human mind. Artificial Intelligence (AI) integrates social science and engineering through a wide range of applications that improve society. It is capable of identifying human commands and using algorithms to interpret data in a similar way to how

human minds operate. Advances in computer technology and artificial intelligence are closely linked to advancements in the economy and society.

The advancement of contemporary science and technology has led to an increase in the commercial applications of artificial intelligence (AI), which have changed how we live and work. It has several benefits, particularly in e-commerce, and is increasingly becoming its driving force (Helmy Mohamad et al., 2022). Artificial Intelligence (AI) is gaining momentum in academia and industry, drawing academics to expand its usefulness across various domains and propel its technological advancements. These days, it aids people in carrying out all kinds of duties, etc. As a result, it is among the key origins of the modern era of development (Ran et al., 2020).

2.6 The rise of influencers in CGI

The creation of humanoid items for use in services and marketing has been made possible by the growing sophistication of AI (Lou et al., 2022; Wirtz et al., 2018). Examples of artificial intelligence (AI) in the physical world include humanoid chatbots (Spillner & Wenig, 2021), virtual agents (Sands et al., 2022), avatars (Miao et al., 2021), and humanoid robots in hotels, frontline, restaurants, and airports (Wirtz et al., 2018; C.-E. Yu, 2020). The anthropomorphic characteristics shared by the aforementioned examples serve to humanize digital experiences in situations where face-to-face connection is not possible (Araujo, 2018). The degree of human-likeness of robots and AI, however, is a key critique of these technologies (C.-E. Yu, 2020). Many consumers find existing applications to be rather unreal, which leaves them feeling unsettling and creepy (Söderlund, 2022). The "uncanny valley effect," describes people's unfavorable emotional responses to anthropomorphic traits or audiovisual simulations that closely resemble people (Mori et al., 2012). Uncanny valley appears to be out of step with the more recent advancements in computer graphics, although being grounded on sound knowledge (Söderlund, 2022; Zhang et al., 2022).

The fusion of robots and visuals, which resulted in the creation of CGI, is one cutting-edge and innovative example (Ahn et al., 2022; Lou et al., 2022). The ability to create CGI has improved with time (Miao et al., 2021). Since CGI is pushing innovation in movies and video games, it seems inevitable that CGI will become a standard marketing tool in the future. According to Lou et al. (2022), CGI influencers are a relatively recent phenomenon on social media. CGI influencers, the human-like virtual influencer receives much less favorable responses (Arsenyan & Mirowska, 2021). But what distinguishes CGI influencers is that they are created with the express purpose of appearing and acting in a way that content marketers find appealing (Drenten & Brooks, 2020). CGI influencers have high perceived physical and social appeal due to their adoption of digital personas (Mrad et al., 2022), which in turn encourages consumer engagement (Ahn et al., 2022).

There is no denying the powerful influence that CGI influencers have (Deng & Jiang, 2023). According to recent studies, consumers' decision-making, brand appraisal, and online experiences can all be greatly influenced by CGI influencers (Ahn et al., 2022; Batista da Silva Oliveira & Chimenti, 2021; Mrad et al., 2022). As a result, it is important to reconsider how people and technology interact, as well as how reality and artifice clash in digital settings (Drenten & Brooks, 2020). However, given the novelty of computer-generated characters in marketing (Lou et al., 2022; Miao et al., 2021), there is still a dearth of information regarding consumer experiences with CGI influencers, which calls for more research (Ahn et al., 2022).

2.7 Participation of users in the social actor framework

It is vital to go back to the origins of human communication with socially conscious computers in order to solidify our understanding of virtual influences (Deng & Jiang, 2023; Gambino et al., 2020). The computers are social actors (CASA) paradigm, which has its roots

in human-computer interaction, is based on the idea that interacting with computers and other new media is inherently social and natural (Nass et al., 1994). Customers typically assume that computers that exhibit human-like characteristics—such as language use, human-like facial features, and the capacity to express emotions—will adhere to a variety of social norms (E. Wang, 2017). But it's important to remember that not all social technologies fall under the purview of the CASA theory (Nass & Moon, 2000). Gambino et al. (2020) stated that this paradigm is applicable solely in cases where technology artifacts demonstrate sufficient social cues that suggest their capacity to function as a benchmark for social interaction.

Previous researches revealed that service robots with gesture-based interfaces can encourage user interaction and foster communication (Chuah & Yu, 2021; Mara & Appel, 2015). Anthropomorphism has been reaffirmed more recently as a key mechanism via which customers react in a social way (Xu et al., 2022). Engagement is a noticeable characteristic when analyzing human social behaviors on social media (Lim & Rasul, 2022). As an example, when virtual agents exhibit emotion in a dramatic way, user involvement can be measured by likes or comments (Chuah & Yu, 2021). Customers of today, who have access to a wealth of knowledge, are more eager to participate in fruitful conversations of fresh perspectives (Lim, 2020).

User engagement has been a crucial success factor in evaluating social media marketing strategies in recent years (Jones & Lee, 2021). According to J. Yu & Egger (2021) the engagement rate is specifically the degree of interaction between users and social media material, including likes and comments. Positive feelings like enjoyment and enthusiasm are frequently linked to liking behaviors, while higher levels of involvement and interactivity on social media are suggested by commenting behaviors (Swani et al., 2017). Research in marketing has shown that user engagement and brand loyalty (Labrecque, 2014), trust (Batista da Silva Oliveira & Chimenti, 2021), and reputation (Song et al., 2020) are positively correlated. Because of this, marketers that work with virtual influencers who have human-like traits are interacting socially with their audience in a way that is in line with the social aspects of the CASA paradigm (Nass et al., 1994). Therefore, businesses may produce more effective and captivating social media content that connects with their audience and fosters higher levels of engagement by knowing how humanlike variables may influence one's behaviors (Cheung et al., 2022; Fotheringham & Wiles, 2023).

2.8 Digital landscape's emotive displays

A rising corpus of research demonstrates the potential of AI to create emotional connections as computers become more sophisticated and intelligent in terms of their extensive uses (Huang & Rust, 2020). According to (Rincon et al., 2018), the CASA paradigm is echoed by the idea that emotional attachments may be formed when interacting with anthropomorphic objects and experiencing psychological traits. Assuming that face-to-face communication can be extended to computer-mediated communication (McShane et al., 2021), pertinent instances can be found in live streaming platforms, where expressing emotions is a potent catalyst for interaction (Lin et al., 2021) with virtual or non-human entities (Chuah & Yu, 2021). More specifically, the six core emotions (disgust, anger, surprise, fear, and sadness) as defined by Ekman (1992) have been shown to have a significant impact on consumer behavior in retail settings (Pantano & Scarpi de Claricini, 2022), social media user engagement, and social interactions (Landwehr et al., 2011). For example, a happy display raises the degree of customer satisfaction (Chuah & Yu, 2021). When people express fear, it suggests a need or urgency that motivates them to act (Roberts & David, 2019). In order to promote emotional involvement, sadness may arouse empathy and emotional resonance (Taruffi et al., 2021). However, if anger is portrayed carelessly, it could be misconstrued and lead to unintentional offense or controversy (Campos et al., 2013). In the same way, one can strategically employ

shock (Chuah & Yu, 2021) and disgust (Fischer et al., 2012) to pique customers' interest in digital media. Through the presentation of surprise, marketers can pique consumers' attention by integrating unexpected experiences into user interfaces (Chuah & Yu, 2021). Furthermore, drawing attention to undesirable aspects using disgusting expressions is likely to get people to notice and interact with the brand message (Fischer et al., 2012).

2.9 Business Performance of MSMEs

Business Performance (BP) is crucial for corporate performance in a competitive business environment (Srimulyani et al., 2023). BP is a strategic component of business management (Chuang & Lin, 2017). Four perspectives are available for measuring business performance (BP): financial, customer, innovation and learning, and internal processes (Taouab & Issor, 2019). In an attempt to expand the company they oversee, business managers incorporate it into every aspect of their daily operations (Srimulyani et al., 2023). The performance of MSMEs can be evaluated by three criteria (Sanchez-Marin & Baixauli-Soler, 2015): 1) Profitability examines how well a business does in terms of reaching its set of financial objectives; 2) productivity, which considers staff productivity as well as the accomplishment of corporate performance in meeting consumer demands and wishes; 3) the market evaluates a company's performance based on its position in the market, market share, and product sales accomplishments. Business development could be affected by BP (Srimulyani et al., 2023). A company's business performance (BP) is divided into two categories: financial performance, which is measured by financial activities and units of currency, and non-financial performance, which is measured by non-financial activities and units of currency and includes things like customer satisfaction with products, organizational performance, innovation performance, and brand strength and reputation (Seo & Lee, 2019). Sales volume, return on capital, turnover rate, and held market share are all indicators of BP (Ontorael et al., 2017). This research uses real sales for measurement of BP.

2.10 Innovation and MSMEs' Business Performance

Innovation can boost corporate performance (Bărbulescu et al., 2021). Consumers seek products that are innovative and tailored to their needs (Barbu et al., 2021). Due to intense rivalry and quick technical advancements, businesses must constantly develop their products to maintain a competitive edge (Farida & Setiawan, 2022). Businesses need to be innovative with the items they frequently market if they want to have a competitive advantage (Amin & Aslam, 2017; Danso et al., 2019; Leiblein et al., 2022). To be competitive in the market and avoid falling behind their rivals, businesses must preserve their competitive advantage in a number of ways (Malesev & Cherry, 2021). The notion of innovation is multifaceted and has a lengthy history, primarily stemming from the rivalry among businesses and the diverse tactics they utilize (Xiong et al., 2021).

The MSMEs' scale, adaptability to change, risk-taking prowess, and quick reaction to market developments have all been shown to be assets. Both large and small businesses are subject to pressures to innovate (Aksoy, 2017). Comparative advantages over large companies in terms of innovation have the potential to make SMEs more competitive than large businesses (Arias-Aranda et al., 2001). Researchers agree that SMEs need to foster an innovative culture in order to increase their level of innovation (Büschgens et al., 2013; Dabić et al., 2019; Hilmansson et al., 2014; Hogan & Coote, 2014; Tang et al., 2020). Certain small firms in Java communities were collaborating with one another, which benefited the companies in the community, encouraged the growth of innovation, raised individual incomes, and enhanced regional income (Prasetyo et al., 2022).

3. Research Methods

A theoretical literature review is conducted in order to achieve the research's goals and objectives, and a conceptual framework for future study is offered. We presented research method that uses by previous researchers (Torkayesh et al., 2023; Vasiljeva et al., 2017). We used 98 articles as study material in this research.

4. Research Findings and Discussion

In the current research, the authors consider the sales of Indonesian MSMEs as dependent variable that affected by digital marketing contents, and AI influencer as a variable affect digital marketing contents. The conceptual model of the research is given at the Figure 1.



Figure 1. Conceptual model of the research

This section explores the implications of our research on the impact of AI influencers on the digital marketing environment for MSMEs in Indonesia. According to our research, there is a strong correlation between MSMEs' sales performance and AI influencers and the content they produce. The emergence of AI influencers offers MSMEs a special chance to create compelling and useful content for digital marketing. Influencers powered by AI can be trained to create content that appeals to particular target markets, which could raise brand recognition and encourage consumer interaction. This is consistent with data-driven marketing techniques becoming more and more important in today's digital environment.

According to our research, AI influencers can have a favorable effect on Indonesian MSMEs' sales. AI influencers can boost sales conversions and aid in the expansion of MSMEs by providing relevant content that appeals to prospective clients. This research emphasizes how AI-powered marketing may help MSMEs become more powerful and level the playing field in the cutthroat online market. Recognizing that the area of AI influencer marketing is still in its infancy and that further investigation is required to fully grasp its long-term implications is crucial. It is also necessary to address the ethical issues related to the disclosure and openness of AI-generated content.

Based on the conceptual model, authors stated the following research questions:

- RQ1: How can AI influencers be effectively integrated into the digital marketing strategies of Indonesian MSMEs?
- RQ2: What types of content created by AI influencers resonate most with Indonesian consumers?
- RQ3: Can AI influencers measurably improve brand awareness, engagement, and sales for Indonesian MSMEs?
- RQ4: Are there cultural or ethical considerations for using AI influencers in the Indonesian market?

In this research, authors analyze based on existing theory that AI influencers affect digital marketing contents, and digital marketing contents affect sales of Indonesian MSMEs. Indonesian MSMEs should use AI influencers to promote their products or services.

5. Conclusion

Based on the conceptual research, authors conclude that AI influencers affect digital marketing contents, and sales of Indonesian MSMEs are affected by digital marketing contents. Indonesian MSMEs should use AI influencers to boost their sales. Suggestions for further research are to conduct empirical research on the concept of this research.

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