

HUMAN VERSUS VIRTUAL INFLUENCERS: THE FUTURE OF INFLUENCE IN DIGITAL MARKETING

Menka

Assistant Professor

PG Department of Commerce and Management, Goswami Ganesh Dutta Sanatan Dharma College, Chandigarh

ABSTRACT

Influencer marketing has transitioned from traditional celebrity endorsements to a sophisticated digital communication strategy, where individuals, communities, and increasingly computer-generated personas influence consumer attitudes and purchasing decisions. A noteworthy development in this field is the rise of virtual influencers, digitally created characters that function as social media personalities. Human influencers fabricate their influence through lived experiences, personal identities, and interpersonal relationships with followers, whereas virtual influencers are managed by individuals, creative agencies, or brands. These digital personas are designed with carefully crafted personalities and visual identities to engage audiences, reduce unpredictability, maintain consistency, and exemplify corporate values. Various companies have adopted virtual influencers to drive creative campaigns and facilitate international engagement. Despite these merits, challenges persist, including ethical concerns, authenticity, and high production costs. This paper examines the distinctions between human and virtual influencers and addresses the challenges associated with this paradigm shift in digital marketing, which is poised to reshape the landscape of influence in the future.

Keywords: Virtual influencers, Human influencers, Brands, Technology, Digital Marketing.

1. INTRODUCTION

Social media has altered the relationship between brands and consumers. Traditional advertising generally involves a clearly defined organization communicating a promotional message to a mass audience (Ajay & Jinka, 2026). Influencer marketing works differently: brands communicate through individuals or personas that have built an audience and are perceived as socially influential. The expansion of Instagram, TikTok, YouTube, and other social media platforms has created an environment in which influencers can function simultaneously as content creators, opinion leaders, entertainers, community builders, and brand ambassadors. Increasing consumer skepticism toward conventional advertising has also encouraged brands to seek communication that appears more personal and relatable. Industry discussion has consequently accentuated authenticity, community, and long-term creator relationships as important components of contemporary influencer marketing.

Virtual influencers can entirely align with brand values and, unlike human influencers; they do not age or risk being cancelled. They symbolized an innovative marketing approach that integrates storytelling, technology, and creativity in unprecedented ways. Virtual influencers are digitally created characters designed to engage audiences on social media platforms, promote products, and embody brand values. For example, KFC developed a virtual Colonel Sanders modeled to generate excitement and engagement. Luxury brands such as Dior and Balmain have utilized virtual models in advertising campaigns that confront traditional concepts of art and fashion. These examples demonstrate the effectiveness of virtual influencers in enhancing engagement, strengthening brand identity, and differentiating businesses in competitive markets. However, these avatars also blur the boundaries between

digital creation and reality, raising questions about authenticity (Kalawanthy, 2025). Consequently, the future of influencer marketing is likely to involve the strategic coexistence of both human and virtual influencers, rather than the complete replacement of one by the other.

2. LITERATURE REVIEW

2a. Meaning and Conceptual Discussion

A human influencer is a real individual who has developed an audience and the capacity to affect followers' attitudes, behaviours, or purchasing decisions through digital content. Human influencers can range from celebrities and professional content creators to micro and nano influencers with relatively small but highly engaged communities (Lee et al., 2024). Their influence can emerge from expertise, attractiveness, relatability, entertainment value, credibility, or perceived similarity with followers. A major characteristic of human influencers is that they can draw upon lived experience. A travel influencer can describe an actual journey, a fitness influencer can discuss personal training experiences, and a beauty influencer can describe personal use of a product. These experiences contribute to the perception that the influencer has first-hand knowledge.

A virtual influencer (VI) is a computer-generated persona that looks a lot like a real person and interacts with the world as a social media influencer (Choudhry et al., 2022). VIs offer advantages over people, such as the lack of scandals and the ease with which their social media activity may be controlled (Statista, 2022). The visibility and impact of virtual influencers are anticipated to grow dramatically in the near future due to recent developments in artificial intelligence (AI). Emerging AI-driven technologies present new opportunities to increase the interaction, engagement, and scalability of virtual influencers. These contemporary technologies can automate and enhance social media interactions, allowing virtual influencers to provide individualized content based on user data analysis and connect authentically with audiences in many languages. Furthermore, generative AI algorithms may create realistic photos or films that show the virtual influencer in various positions, attire, or environments, eliminating the need for manual rendering and increasing content adaptability (Audrezet, Koles, Moulard, Ameen & McKenna, 2025).

2b. Theories for Comprehending Online Influencers

According to Parasocial interaction theory, people develop one-sided psychological ties with media celebrities, especially virtual influencers. These connections, like those with real-life celebrities, can help followers to relate a digital personality on a personal level, which can change their attitudes and actions (Kalawanthy, 2025). Additionally, the source credibility theory mainly emphasizes how individuals view the reliability and experience of a message's source. Accordingly, a virtual influencer's perceived credibility, authority, and authenticity strongly impact on how successful their marketing recommendations. This credibility can greatly aid the development of parasocial interactions with followers (Jhawar, Kumar & Varshney (2023); Kalawanthy, 2025).

2c. Studies on Human and Virtual Influencers

Kalawanthy (2025) examined the rise and impact of virtual influencers (VIs) in marketing, emphasizing their growing adoption by brands due to their flexibility, reliability, and creative potential. According to this study, digital identities that replicate human influencers are widely used in lifestyle, fashion, and cosmetics to create interactive advertising experiences. While highlighting their potential, the study also acknowledges key drawbacks. VIs often promotes unrealistic body standards, lack authenticity, and raise significant ethical concerns.

This research suggested that VIs may generate lower trust and exert less influence on consumer behaviour compared to human influencers. Nonetheless, they are shown to be effective in endorsing functional products where emotional trust plays a smaller role. The paper further applied parasocial interaction and source credibility theories to explain the effectiveness of VIs. The authors emphasized that transparency and ethical practices are essential for integrating VIs into marketing strategies responsibly. Jain & Jain 2024 in their study, explored the dual role of virtual influencers (VIs) by analyzing both the advantages they provide to brands and the potential drawbacks for consumers. Using a comparative approach, the study examines “Kyra,” a domestic virtual influencer, and “Lil Miquela,” an international counterpart. Findings highlighted that VIs can generate positive outcomes for brands, including enhanced visibility, innovative engagement, and alignment with modern digital marketing strategies. At the same time, the paper underscored consumer-related concerns such as questions of authenticity, unrealistic portrayals, and limited emotional connection. By contrasting domestic and international cases, the study offered valuable insights into the complex dynamics of virtual influencer marketing, demonstrating that while VIs can strengthen brand impact, they also raise ethical and relational challenges for consumers.

Kim and Baek (2024) investigated how consumers respond psychologically to virtual influencers. Their research focused on perceived creepiness, authenticity, emotional attachment, and word-of-mouth intentions. The study is important because it demonstrates that simply creating a realistic-looking virtual influencer does not automatically result in positive consumer reactions. The researchers found that audience perceptions of virtual influencers can influence emotional attachment and willingness to engage in word-of-mouth communication. In particular, perceived authenticity is important in determining whether audiences develop positive relationships with virtual influencers. At the same time, an overly artificial or unsettling appearance may produce feelings of creepiness, which can weaken positive responses. The study therefore highlighted a major challenge for virtual influencers; they need to appear sufficiently human to create social connection but not so artificial or unnatural that audiences reject them. Compared with human influencers, virtual influencers have greater control over their appearance and personality. However, this advantage can also become a disadvantage because excessive perfection or artificiality may reduce perceived authenticity. Jhavar, Kumar & Varshney (2023), in their paper explored the growing phenomenon of virtual influencers (VIs) on social media and sought to establish a theoretical framework for understanding their acceptance by social media users (SMUs). Given the scarcity of prior research on VIs in marketing, the study employed a structured literature review and case study approach to develop a conceptual model. Their findings highlighted the central role of parasocial interaction (PSI) and source credibility theory in explaining VI acceptance. The study argues that PSI builds source credibility, which in turn fosters trust and acceptance of VIs. Additionally, perceived similarity between users and VIs is identified as an important dimension of credibility. A comparative analysis of leading VIs demonstrates their effectiveness across industries such as fashion, electronics, tourism, and healthcare, particularly in promoting luxury products. The paper emphasized that VIs can enhance brand awareness and appeal strongly to younger consumers, notably Generations Y and Z.

Kim and Wang (2024) examined the differences between human social-media influencers and virtual influencers, with particular attention to source credibility, authenticity, and advertising effectiveness. The researchers compared three types of influencers: human influencers, human-like virtual influencers, and anime-like virtual influencers. Their study used an experimental design to investigate how different influencer types affected consumer perceptions in both commercial and non-commercial communication contexts. The study

suggested that authenticity and source credibility play important mediating roles in determining advertising effectiveness. The findings indicated that the degree of human-likeness of a virtual influencer could affect how audiences evaluate the influencer and the message. This study demonstrates that virtual influencers should not simply be considered less effective because they are artificial. Instead, their effectiveness depends on how audiences interpret their authenticity and credibility. However, human influencers continue to possess an important advantage because they can draw upon real-life experiences and personal relationships with their followers. In addition to previous studies, Mouritzen, Penttinen & Pedersen (2024) conceptualized the domain of virtual influencer marketing by clearly differentiating virtual influencers from real-life influencers and other digital characters. It identifies four distinctive elements customization, flexibility, ownership, and automation that set virtual influencers apart. Building on these, the authors introduce a 2×2 taxonomy structured around the dimensions of anthropomorphism and reality virtuality, providing a useful framework for classification. The study not only outlined the opportunities that virtual influencers offer, such as controlled brand alignment and scalability, but also draws attention to inherent risks, including authenticity concerns and consumer skepticism. By integrating these insights, the paper made a theoretical contribution to the literature on influencer marketing while also delivering practical guidance for brands seeking to incorporate virtual influencers into social media campaigns.

In the study conducted by Yan, Xia, Jiang & Lin (2024), the authors examined how consumers' emotional attachment and benefit seeking differ across the three types of VI (i.e., mimic-human VI, animated-human VI, and non-human VI). It was further proposed that VIs may influence consumer emotional attachment and different benefit-seeking behaviour through social presence because, specifically, when a VI shows a higher level of social presence, a higher level of emotional attachment and stronger benefit-seeking behaviour will result. The experimental studies lend support to our theorization. This research provides insights into the different types of VIs in marketing literature and extends the context of social presence theory. Rossi & Rivetti (2023) in their paper explored the rise of virtual influencers (VIs) within the rapidly expanding influencer marketing industry. Focusing on Generations Y and Z, the study used two focus groups to examine how younger consumers perceive VIs and their potential to influence purchasing decisions. Findings indicated that human influencers remain more effective, as participants struggled to identify with digital personas, questioned their authenticity, and viewed them as artificial entities driven by commercial motives. The paper highlighted both the growing relevance of VIs and the challenges they face in gaining trust and empathy compared to human influencers.

Conti, Gathani, & Tricomi (2022), examined the emergence of virtual influencers (VIs), defined as CGI-based characters that resemble humans but exist only digitally. While social media influencers have long shaped online culture, the rise of VIs is relatively recent. It has generated significant interest and debate concerning their evolution, ethics, marketing role, and prospects. Using a comprehensive approach that includes literature, press coverage, social media data, blogs, interviews, and survey results, the study offered an in-depth reflection on the VI phenomenon. It identified both opportunities and threats, compared VIs with human influencers, and highlighted leading examples and brand collaborations. An online survey with 360 participants provided additional insights into public perceptions. Findings revealed a divided view: while some respondents recognize the marketing potential of VIs, others raise concerns about authenticity, ethics, and their ability to form genuine connections. Overall, the paper underscores the novelty and complexity of VIs, positioning them as both promising tools for brands and subjects of ongoing societal and ethical debate.

The reviewed studies show that virtual influencers offer brands flexibility, creativity, scalability, and strong digital engagement, particularly among younger consumers. However, compared with human influencers, VIs often face challenges related to authenticity, trust, emotional connection, unrealistic beauty standards, and ethical concerns. Overall, the literature suggests that while human influencers remain stronger in building trust and genuine relationships, virtual influencers can be effective when supported by transparency, social presence, and appropriate brand-audience fit.

3. RESEARCH METHODOLOGY

Research Gap: While existing studies have thoroughly examined virtual influencers regarding authenticity, credibility, parasocial interaction, and consumer engagement, relatively few have compared human and virtual influencers, especially within the Indian context. There is a need to explore how Indian consumers perceive both influencer types in terms of trust, authenticity, engagement, purchase intention, and ethical considerations. This study addresses this gap by comparing the characteristics, advantages, challenges, and future potential of human and virtual influencers in digital marketing. A descriptive research design is employed to explore these differences and the challenges associated with virtual influencers in marketing. The study relies on secondary sources including research papers, articles, magazines, published reports, and reputable online sources.

Objective of the study: This study aims to describe the differences between human and virtual influencers and examine the challenges associated with virtual influencers in marketing.

4. DISCUSSIONS

The term "human" is frequently used to emphasize that virtual influencers typically acquire "human-like" attributes. Virtual influencers encourage human connections by creating content that emulates human behaviour, often presenting a manifestation of genuine humanity. Each virtual influencer displays significant anthropomorphic qualities within their constructed "personalities." These digital personas, generated by artificial intelligence or computer graphics, can range from anthropomorphized animals or objects to highly realistic human-like characters. The narratives and personalities of virtual influencers, generally managed by digital agencies, brands, individual creators, or AI systems, are carefully arranged to make them appear as fictional characters engaging directly with audiences as social media influencers (Jain & Jain, 2024). They produce content for social media and digital platforms to enhance audience engagement through immediate and interactive material, often in collaboration with businesses. While virtual influencers offer several advantages, such as greater brand control and the ability to specify traits that align with brand values (Schaffer & Schaffer, 2024), they also present certain drawbacks. Virtual influencers are cost-effective, provide consistent content, and engage audiences without generating controversy (Jain & Jain, 2024).

4a. Major differences between Human and Virtual Influencers

Authenticity

Authenticity is arguably the most significant distinction between human and virtual influencers. Human influencers can establish authenticity through ordinary experiences: showing mistakes, discussing personal challenges, sharing behind-the-scenes content, or explaining how they actually use a product. Even when the content is sponsored, followers may observe the recommendation as credible if they believe it, reflects the influencer's genuine opinion (Kalawanthy, 2025). Virtual influencers face a different challenge. Their entire identity is constructed. Their face, personality, environment, and lifestyle may be

fictional. This does not necessarily make virtual influencers ineffective. Instead, it changes the meaning of authenticity. For a virtual influencer, authenticity can emerge from consistent characterization and transparent storytelling rather than from biological reality.

Trust and Credibility

Trust is fundamental to influencer marketing because consumers often use influencers as informal sources of information. Human influencers have an advantage when the product requires personal experience. For example, a person explaining how a skincare product affected their skin or how a particular camera performed during travel can provide experiential information. A virtual influencer cannot literally experience a product in the same biological sense. Consequently, claims based on personal experience can create ethical and credibility problems if audiences are led to believe that the virtual character personally used a product when it did not. Virtual influencers may nevertheless generate trust through other mechanisms (Rossi, C., & Rivetti, F., 2023). Research on virtual influencers demonstrates that perceived humanness can be an important mechanism through which trust develops. Human influencers therefore possess a potential experiential credibility advantage, whereas virtual influencers may possess a design and consistency advantage.

Audience Relationships and Parasocial Interaction

Both human and virtual influencers can establish parasocial relationships, a one-sided relationship in which audiences develop feelings of familiarity, attachment, or connection toward media personalities (Kalawanthy, 2025). Human influencers can strengthen these relationships through personal stories, live broadcasts, direct responses, spontaneous content, and demonstrations of vulnerability. Virtual influencers can replicate many of these communication techniques. They can post frequently, develop recurring storylines, respond to followers, and sustain recognizable personalities. The important difference is the underlying relationship. With a human influencer, followers can rationally think that there is an actual person behind the account who has personal experiences and emotions. With a virtual influencer, the apparent personality is ultimately mediated by the people and systems responsible for creating the character (Rossi, C., & Rivetti, F., 2023).

Creativity and Storytelling

Virtual influencers have a major advantage in creative flexibility. A human influencer remains subject to physical reality. A virtual influencer can travel to fictional locations; change appearance instantly; participate in futuristic environments; interact with animated characters; appear in impossible physical situations; adopt different fashion styles without physical constraints; and produce highly stylized visual narratives. This makes virtual influencers particularly attractive for fashion, entertainment, gaming, technology, and luxury branding. Human influencers, by contrast, possess a different creative advantage: lived experience. A human can tell a story based on something that actually happened (Conti, M., Gathani, J., & Tricomi, P. P., 2022). They can improvise in unpredictable situations, provide personal testimony, and communicate nuanced emotions arising from real events. Therefore, virtual influencers offer imaginative scalability, whereas human influencers offer experiential richness.

Control and Brand Safety

From a brand's perspective, control represents one of the strongest rewards of virtual influencers. A virtual persona can be designed according to a brand's desired appearance, personality, tone of voice, values, visual identity, posting schedule, and narrative direction. A human influencer cannot be controlled to the same degree. They have personal lives,

opinions, political beliefs, relationships, and behaviours outside sponsored campaigns. This creates both opportunity and risk. A human influencer can produce unanticipated content that damages a brand's reputation. Conversely, the same liberty can make the influencer appear more authentic (Jhavar, A., Kumar, P., & Varshney, S., 2023). Virtual influencers reduce some forms of unpredictable personal behaviour because a controlling organization manages their identities. However, they fetch new risks involving artificiality, transparency, stereotyping, and manipulation. Thus, greater control does not necessarily mean greater credibility.

Engagement and Consumer Response

It would be inaccurate to assume that virtual influencers automatically generate lower engagement than human influencers. Their unusual appearance and novelty can attract attention, while their carefully designed content can encourage sharing and discussion. Research has demonstrated that virtual-influencer posts can influence consumers and that specific content features can amplify their effectiveness. However, engagement should not be confused with persuasion. A virtual influencer may produce large numbers of comments because audiences find the character fascinating or unusual. That does not inevitably mean those audiences trust its product recommendations. Human influencers may have an advantage when campaigns require trust and personal recommendation, while virtual influencers may perform strongly when campaigns emphasize novelty, visual creativity, entertainment, or futuristic brand positioning.

Commercial and Regulatory Considerations

Influencer marketing raises important questions concerning advertising transparency. The U.S. Federal Trade Commission states that influencers must disclose relevant financial, employment, personal, or family relationships with brands. It also emphasizes that consumers should not be expected already to understand an influencer's commercial relationship with a company. Importantly, the FTC's revised 2023 Endorsement Guides specifically expanded the definition and discussion of endorsements to address virtual influencers (Federal Trade Commission, 2023). This means virtual influencers should not be treated as a regulatory loophole simply because they are fictional. For example, if a brand controls a virtual character and uses that character to promote a product, audiences should be able to comprehend the commercial nature of the communication. Transparency is particularly important because the artificial nature of the persona can otherwise make the message appear more organic than it actually is. Research on social-media advertising disclosures has also demonstrated broader problems with disclosure practices. A large scale study of YouTube and Pinterest content found that only a small proportion of examined affiliate-marketing content contained disclosures. At the same time, users often failed to understand short or unclear disclosure language. Therefore, the growth of virtual influencers strengthens rather than reduces the need for transparent advertising practices.

Major Differences Between Human and Virtual Influencers		
Dimension	Human Influencers	Virtual Influencers
Identity	Real person	Digitally constructed persona
Source of personality	Individual's lived experiences and personality	Designed personality and narrative
Authenticity	Based largely on perceived genuineness and lived experience	Based on consistency, transparency, storytelling, and perceived realism

Content control	Limited by real-world circumstances	Highly controllable
Physical limitations	Subject to time, location, health, and availability	Can theoretically appear anywhere and anytime
Scalability	Limited by the individual	Highly scalable through digital production
Brand control	Relatively limited	Potentially very high
Reputation risk	Personal behaviour can affect brand	Managed by the organization controlling the persona
Emotional connection	Can be deep because of perceived human relationship	Can be strong but may depend more on narrative and anthropomorphic design
Creativity	Constrained by physical reality but enriched by lived experience	Almost unlimited visual and narrative possibilities
Transparency	Individual sponsorships and relationships must be disclosed	Sponsorship and artificial identity should be transparently communicated
Commercial consistency	Can vary according to individual preferences	Can be tightly standardized
Ethical concerns	Privacy, disclosure, misinformation, personal conduct	Deception, identity representation, AI transparency, manipulation

Source: Author's Self Compilation from the literature review

4b. Challenges, Risks and Ethical Concerns of Virtual Influencers

Even though automating virtual influencers has its benefits, it also has its drawbacks. Many people are still nervous about AI-led interactions, which can make them less likely to get involved. Some owners may hide the fact that influencers are driven by AI or exploit consumer data, which raises privacy and ethical issues. Also, AI-driven influencers might be tricked or given wrong information, which can lead to spread of incorrect information that affects both consumers and the brand's reputation.

1. **Authenticity and Trust:** Audiences generally follow influencers whom they perceive as genuine and experienced. Since virtual influencers are computer-generated, they lack the capacity to experience products, services, or emotions directly. This limitation hampers their ability to create emotional connections and build trust with audiences. If followers perceive a lack of honesty, they may view recommendations as scripted or manipulative, thereby undermining brand credibility. Transparency, trustworthiness, and authenticity are essential for all influencers. In the context of virtual influencers, questions arise regarding the legitimacy of product endorsements, as these AI-driven personas cannot physically test or experience products. This fundamental difference prompts skepticism about the trustworthiness of virtual influencer recommendations.
2. **Ethical Questions:** The emergence of virtual influencers raises significant ethical considerations. Ownership of a virtual influencer's identity is often ambiguous, involving creators, managing agencies, or sponsoring brands. Transparency is another critical issue, as it is essential for audiences to be aware when interacting with AI-driven entities. A lack of openness may be perceived as deceptive, potentially eroding consumer trust and attracting increased regulatory scrutiny.
3. **High Production Costs:** Making a virtual influencer involves a lot of money for advanced computer graphics, AI modeling, animation, and storyline development. In

addition to development, the influencer needs to constantly make and update information to stay relevant and interesting. Content creation for virtual influencers is resource-intensive, encompassing ongoing expenses for computer graphics professionals and technical support. In contrast, human influencers can often generate substantial content with comparatively less investment, enabling more frequent activity. These costs are usually greater than working with real people as influencers, especially for smaller firms with limited marketing expenditures. Possible Backlash: Some people like virtual influencers because they are new and interesting, while others think they are fake and not real. Critics say they could hurt human creativity and make it harder for actual influencers to find work. Also, overusing digital identities could annoy people who prefer real human interactions, which could hurt the brand's reputation instead of helping it.

4. **Unreasonable Expectations:** Virtual influencers may contribute to unrealistic perceptions of appearance, style, and culture. Adolescents, in particular, may feel pressured to conform to these artificial standards, which can negatively impact their mental and physical well-being, even though these digital personas do not exist in reality.
5. **Unrealizable Relationships:** Consumer relationships with virtual influencers are inherently limited. Fans cannot interact with or meet these digital personas in real life, which may result in a perceived lack of personal connection and potentially diminish brand loyalty.

4d. Emerging Trends in India's Influencer Market

1. **Growth of Micro and Nano Influencers:** Brands are increasingly working with smaller influencers because they often have highly engaged and niche audiences, making promotions more relatable and targeted.
2. **Rise of Regional Influencers:** Influencers creating content in Hindi and other regional languages are gaining popularity, especially in Tier-2 and Tier-3 cities.
3. **Short-Form Video Content:** Instagram Reels and YouTube Shorts have become important platforms for reaching large audiences quickly through entertaining and informative content.
4. **Focus on Authenticity and ROI:** Brands are moving beyond follower counts and focusing more on genuine engagement, audience trust, conversions, and return on investment.
5. **AI and Virtual Influencers:** Artificial intelligence is being increasingly used for content creation, influencer selection, and campaign analysis, while virtual influencers are emerging as a new form of digital brand promotion.
6. **Creator-Led Commerce:** Influencers are increasingly launching their own products and using affiliate links and social-commerce tools, transforming themselves from content creators into entrepreneurs.

Overall, the influencer market in India is becoming increasingly regional, technology-driven, measurable, and commercially oriented, with authenticity and audience trust remaining essential components.

5. CONCLUSION AND FUTURE RESEARCH DIRECTIONS

This study concludes that human and virtual influencers constitute two distinct yet increasingly interconnected forms of digital marketing communication. Human influencers primarily derive their influence from lived experiences, authenticity, emotional connection, trust, and personal relationships with followers. Conversely, virtual influencers provide brands with enhanced creative control, consistency, scalability, flexibility, and reduced personal and reputational risks. The literature reviewed demonstrates that virtual influencers can achieve substantial consumer engagement, especially among younger and digitally active audiences. Nevertheless, they continue to encounter challenges related to authenticity, trust, emotional attachment, unrealistic beauty standards, transparency, ethical considerations, and high production demands. Human influencers generally retain an advantage in campaigns that rely on personal experience, credibility, and emotional trust. In contrast, virtual influencers may be more effective in campaigns that prioritize creativity, innovation, entertainment, and strong brand control. The findings suggest that virtual influencers are unlikely to fully replace human influencers. Instead, the future of digital marketing will likely involve the coexistence and strategic integration of both human and virtual influencers. In the Indian context, the increasing adoption of regional creators, micro- and nano-influencers, short-form content, AI technologies, and virtual influencers is expected to further transform influencer marketing. The future trajectory of influencer marketing points toward greater integration of AI, virtual influencers, and human creators, it's rather than the complete substitution of human influencers. Advances in AI and computer-generated imagery may enhance the realism, interactivity, and personalization of virtual influencers, while collaborations between humans and AI may combine technological innovation with human authenticity. In India, the growth of regional-language content, micro-influencers, and AI-driven marketing is also anticipated. Future research should focus on consumer trust, authenticity, engagement, purchase intention, ethical considerations, and the comparative effectiveness of human and virtual influencers, particularly among Indian consumers.

REFERENCES

1. Ajay, C., & Jinka, D. S. (2026). A study on evaluating the role of social media in enhancing customer engagement and loyalty with reference to Sangeetha Mobiles Pvt. Ltd. Zenodo. <https://doi.org/10.5281/zenodo.21022748>
2. Audrezet, A., Koles, B., Moulard, J. G., Ameen, N., & McKenna, B. (2025). Virtual influencers: Definition and future research directions. *Journal of Business Research*, 200, 115647.
3. Choudhry, A., Han, J., Xu, X., & Huang, Y. (2022). "I felt a little crazy following a 'doll'": Investigating real influence of virtual influencers on their followers. *Proceedings of the ACM on Human-Computer Interaction*, 6(GROUP), 1–28.
4. Conti, M., Gathani, J., & Tricomi, P. P. (2022). Virtual influencers in online social media. *IEEE Communications Magazine*, 60(8), 86–91.
5. Federal Trade Commission. (2023). Federal Trade Commission announces updated advertising guides to combat deceptive reviews and endorsements.
6. Jain, A., & Jain, A. (2024). Managing the dual effect of virtual influencers: Examining benefits to brands and drawbacks for consumers. *International Journal of English Literature and Social Sciences*, 9(5), 254–259.
7. Jhavar, A., Kumar, P., & Varshney, S. (2023). The emergence of virtual influencers: A shift in the influencer marketing paradigm. *Young Consumers*, 24(4), 468–484.
8. Kalawanthy, K. (2025). Exploring the Impact of Virtual Influencers in Modern Marketing. *Grenze International Journal of Engineering & Technology (GIJET)*, 11(Part2), 2145.

9. Kim, D., & Wang, Z. (2024). Social media influencer vs. virtual influencer: The mediating role of source credibility and authenticity in advertising effectiveness within AI influencer marketing. *Computers in Human Behavior: Artificial Humans*, 2(2), 100100. <https://doi.org/10.1016/j.chbah.2024.100100>
10. Kim, M., & Baek, T. H. (2024). Are virtual influencers friends or foes? Uncovering the perceived creepiness and authenticity of virtual influencers in social media marketing in the United States. *International Journal of Human–Computer Interaction*, 40(18), 5042–5055. <https://doi.org/10.1080/10447318.2023.2233125>
11. Lee, H., Shin, M., Yang, J., & Chock, T. M. (2024). Virtual influencers vs. human influencers in the context of influencer marketing: The moderating role of machine heuristic on perceived authenticity of influencers. *International Journal of Human–Computer Interaction*. <https://doi.org/10.1080/10447318.2024.2374100>
12. Mouritzen, S. L. T., Penttinen, V., & Pedersen, S. (2024). Virtual influencer marketing: The good, the bad and the unreal. *European Journal of Marketing*, 58(2), 410–440.
13. Rossi, C., & Rivetti, F. (2023, May). Virtual influencer marketing: Is it effective in engaging younger generations? In *Proceedings of the 10th European Conference on Social Media (ECSM) (Vol. 10)*.
14. Schaffer, N. (2024, April 9). AI and virtual influencers: What is their role in influencer marketing? (With examples). Neal Schaffer Official Site. <https://nealschaffer.com/virtual-influencers>
15. Statista. (2022). Virtual influencers—Statistics & facts. <https://www.statista.com/topics/9805/virtual-influencers/>
16. Twimbit. (2025). State of virtual influencers 2025. <https://www.twimbit.com>
17. Yan, J., Xia, S., Jiang, A., & Lin, Z. (2024). The effect of different types of virtual influencers on consumers' emotional attachment. *Journal of Business Research*, 177, 114646.