



# The Influence of Virtual Influencers on People's Consumption

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**Abstract.** With social media and digital economy booming on the Internet, virtual influencers as a relatively new and influential thing are gradually entering the vision of consumers and enterprises. This study collects research on influencers and virtual influencers from 2006 to 2022, including embryonic studies of class influencers and influencer marketing and, the formulation and development of theories and the emergence and differentiation of the concept of virtual influencers. This study will summarize the research conducted over the years, and will provide a clear history of the development of virtual influencers and conclude that virtual influencers have room for development in the future and have influenced consumers' consumption choices.

**Keywords:** Influencers · virtual influencers · influencer marketing

## 1 Introduction

With the development of the Internet and social media, among others, influencers are increasingly influencing people's consumption. With the growing influencer community, as well as the rapid growth of the Internet economy and the increase in digital media marketing, influencers have also seen multiple divisions and influence different groups and different consumptions. This literature focuses on virtual influencers and will make some predictions about the future of the influencer economy industry. Most of them have a positive attitude toward the influencer market with few dissenting voices, while the debate is more intense on whether virtual influencers will replace traditional influencers and the future direction and fa of virtual influencers. Jumin Lee made an analytical forecast of the future based on a smaller case study despite the limited development of the Internet economy at the time [1]. Atika Hermanda and Arum Nurhandayani reached similar conclusions at similar times [2, 3]. And Minjung Kim and Rafki Chandra Wibawa reached similar conclusions with some commonality for virtual influencers at almost the same time [4, 5]. They examine the influencer market in general and the impact of traditional real influencers on people's consumption, and examine the impact of virtual influencer endorsements on people's consumption, as well as the commercial liability of virtual influencer endorsements and the application of virtual influencer technology in other areas. Most of the research in recent years (especially 2022) has focused on virtual

influencers, thus showing that this is a hot topic in the influencer field [4–11]. However, this literature rarely considers the impact of virtual influencers as a whole on people's consumption, and is almost always scattered across sub-modules, with no systematic research emerging.

## 2 Literature Review

This literature, starting with the study of limited platforms and limited users on the Internet before the emergence of Internet-related influencers on a large scale, corroborates the sprouting of influencers and influencer economies on the Internet with the development of the Internet and the Internet economy. The papers in the influencer emergence period focused on the influence of influencers on consumer decisions and consumer perceptions of brands, with mostly supportive conclusions. The branch of virtual influencers emerged as influencers were making their way to various platforms. At first it was not on the minds of scholars, but as the technology advanced and the audience grew, more studies on virtual influencers emerged, even for the various branches of virtual researchers. The answer to the questions raised in previous studies, such as whether virtual influencers will completely replace traditional influencers, is that such a trend may exist in this article, but since people are not currently more accepting of virtual influencers than they are of influencers, perhaps this trend exists and will come true in the future, and for now the influencer market will continue to be dominated by traditional influencers for some time.

There is a gradual process in any research, and the same is true for research on virtual influencers. From the related study of the impact of website consumer reviews on other consumers and websites to the basic influencer marketing, and then from the virtual influencer becoming a branch of influencer theory to the emergence of three distinct branches of virtual influencer theory. The year 2020 can be seen as an important watershed for influencer research. Before 2020 the study of influencers was basically the study of real influencers, and in earlier years may have studied the influencer market as a whole, while after 2020 articles on virtual influencers began to appear on a large scale, especially in 2022 virtual influencers were further divided into virtual idols carried by technologies such as AI and vtuber supported mainly by real people, and extended from the market to other areas of application.

The research on influencers has evolved step by step. The initial research could only be done with limited website resources and user resources due to the limitations of the Internet, but it still laid the foundation for future research. Jumin Lee, the impact of user reviews on consumer trust on a niche platform such as a website was studied, which was limited by the level of development of the Internet economy at the time, but could also be seen as a scaled-down version of social media or an embryo of social media, with some of the same users becoming influencers in this limited platform [1]. Jumin Lee uses consumer endorsements to expand the consumers' judgments based on other consumers' evaluations on book buying sites and extended to the transferability of site trust to OCR and CEA. In addition, it tests which source trustworthiness is more influenced by site trust [1]. Compared with subsequent studies, this study is very limited, but the most important thing is that it considers consumer evaluation on websites and

word-of-mouth itself as something that may influence consumer judgment, which is an advancement and a predecessor of recent research ideas. The emergence of influencer theory has also gone through a certain process, from the discovery of the influence of influencers on business marketing to the clear proposal of the existence of influencer market theory took a certain amount of time, but its research process has advanced very quickly compared to other theories. Research from this time period represented by Steven Woods and Arum Nurhandayani began to look at the importance of influencers for brands. The research in this time period represented by Steven Woods and Arum Nurhandayani started to focus on the importance of influencers for brands. And the studies in this time period have noticed the influence of influencers on social media on consumers' buying behavior, and the findings are divided into indirect and direct influence by influencing consumers' impressions of the brand, but the final conclusions can be classified as having some influence [2, 8]. Virtual influencers have been noted during this period and it is believed that they can influence people even though they do not actually exist. During this time period they also noted that social media is a major medium for company advocacy and that in some industries a few appropriate influencers on social media are important to a company's brand, and that Millennials behave differently than other generations of consumers Millennials rely more on the Internet for their shopping [2]. Steven Woods confirms the rise of influencer marketing and the importance brands place on it by interviewing 13 people working in the New York advertising industry [8]. Atika Hermanda concludes that social media influencers do not have a significant direct impact on consumers' purchase intentions, but rather achieve this indirectly by influencing brand image and consumers' self-concept [3]. Arum Nurhandayani also reached similar conclusions as the former and was studied more extensively [2]. Anna Darner proposes that virtual influencers are a modern phenomenon, similar to traditional influencers, and that although these influencers do not actually exist, they can still have an impact on others [9].

A number of theories have been developed after scholars discovered the impact of rapidly growing influencers on business and product marketing, and virtual influencers are beginning to be noticed and studied as a very new and fast-growing segment. Research related to influencers and virtual influencers started to increase rapidly from 2020 onwards. Hea-soo Jang and Evangelos Moustakas were used as examples for the analysis of the current year's study. Bionic 3D virtual influencers simulated by Internet virtual technology, which received attention in 2020, were repeatedly used as research subjects during the year. The subject group had both positive and negative attitudes toward the virtual influencers. Positive factors include good looks, attractive personality and interesting story background, while negative factors include detachment from reality and lack of humanization. However, these studies acknowledge the potential for virtual influencers to have some influence on brand image and consumers, and provide an outlook on the future of virtual influencers. Two future directions for the development of virtual influencers are envisioned in some studies, namely, life-like and cartoonish, which are not unpredictable for new kinds of virtual influencers in the future [10, 11]. Hea-soo Jang explores, based on qualitative data, consumer perceptions of 3D virtual simulation influencing factors and their application perceptions, and it sees a very

promising future for virtual influencers [10]. Evangelos Moustakas addresses the investment risks of virtual influencers identified by experts, but also expresses affirmation of the industry and expectations for future consumer-oriented research [11]. Esperanza Miyake examines the virtual influencers of Japanese commodification at the intersection of Western consumer culture and Japanese consumer culture [11]. SARAH MARIE SHARRAR BROWN revealed that purchase intention was enhanced by the presence of a virtual influencer and that brand-endorser fit did not enhance the persuasiveness of the virtual influencer [12]. Jenna Drenten reveals the emergence of the next wave of virtual influencers in technological development and showcases the creative team behind her [13]. Anna Coates was concluded on an experimental basis that influencers on popular social media influence children's food intake, especially junk food intake [14]. By 2021, research on virtual influencers is even deeper. Research has been done on the perception and acceptance of human-like virtual influencers and cartoon virtual influencers, and the results show that cartoon virtual influencers are more popular than human-like influencers. Some studies have suggested that younger generations would prefer virtual influencers, but the findings do not support this. Some studies have found negative attitude comments in the ins comments of some virtual influencers, but this is because people themselves are not yet familiar with virtual influencers, and in the future this is likely to change. The study by Sriya Kota mentions that social software such as Instagram is changing the way people receive advertising messages, so influencers on social media are important for the company's promotion [15]. Although it is not yet mature, influencer marketing offers a new opportunity for marketers. Endorsers Fanny Cheung, Survey findings do not show favourable views on virtual celebrity and cartoon character celebrity is found to be more preferred to humanlike celebrity [16]. Prof. Ki-Hyang Han argues that most virtual influencers are expected to be active as consumers' perceptions of virtual influencers change, making it necessary to analyze and study the differences in consumer perceptions brought about by virtual influencers in subsequent studies [17]. Xiaoyu Guo, the key lesson to take away from this report is that interaction between influencer and consumer, celebrity worship, and crosschannel cooperation have a positive relationship with consumer purchase in the leisure food industry [18]. Sriya Kota, the aim of this study was to provide a comprehensive structure that can help understand Influencers on Instagram and how these Influencers are optimally utilized for maximum efficiency, and this research throws light on various attributes of an Influencer and offers a novel contribution by examining various influencer profiles to build a model of Instagram Influencers [15]. Daniel Farrera Saldaña indicates virtual influencers are a new, and still scarce, phenomenon [19]. However, we could see a rise of these virtual identities in social media in the near future. The nature of cartoon characters could help them to take advantage of such a format, and possibly even outperform their fictional or maybe even their real human counterparts.

As the Internet fan economy soars and fee-based simulated intimacy on the Internet emerges and comes into focus, virtual influencers are divided into three main categories. Humanized weblebrities simulated by artificial intelligence with real-like and life-like interactions and photo-video are called virtual influencers. The products that use cartoon as the selling point and collect some data of real people for electronic processing and then use virtual image as the core to generate cartoon image by various technologies are

called virtual idol, and the anchors that use real human as the operator, use cartoon or 3D modeling to build attractive virtual appearance and add some fictional magic stories to interact with the audience and perform talents and provide personalized services by live people are called virtual yo YouTuber. More kinds of more comprehensive and in-depth studies on virtual influencers are starting to emerge in 2022. The first is a study by Mauro Conti that divides traditional virtual influencers into three categories: virtual influencers and virtual idol and virtual Youtuber [20]. The opportunities and threats of virtual influencers are described separately in the study. The opportunities are that they are more flexible than traditional influencers and can serve only one brand with exclusivity, avoiding a decline in brand reputation due to the personal behavior of the spokesperson and appealing to younger consumers [20]. The disadvantages are that consumers may have unrealistic expectations of virtual influencers, and virtual influencers may be less realistic for consumers due to various limitations, and finally the cost issue is not negligible [20]. In his study, Minjung Kim demonstrates that virtual influencers are attractive and influential to audiences, and adds to the authenticity and character of virtual influencers that audiences value more today with the increasing number of virtual influencers [4]. There are also multiple studies that address issues such as the legal liability of endorsements by virtual influencers. Mauro Conti illustrates the controversies on virtual influencers, such as ethical issues, through different interviews. Minjung Kim makes sense from an academic point of view of the persuasive effect of virtual influencer, but there are several limitations [4]. Rafki Chandra Wibawa, the recommendation for further research is that no research shows in detail the correlation between the success of promotion of virtual influencers and the revenue of a brand or product [5].

### 3 Thematic

This literature is divided in its later stages on the impact of virtual influencers on people's consumption, ranging from clear outlooks to denials and criticisms, and others have suggested that virtual influencers are a threat to traditional influencers.

### 4 Conclusion

As a new member of the influencer market, virtual influencers have been the subject of intense and mixed research in the last two years. Based on various interviews and experiments conducted by previous authors, I have tried to divide the factions into two categories: pro and con, although some of the papers are of course a combination of both. To sum up, the influence of virtual influencers on people's consumption is a topic worthy of deeper investigation.

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