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The virtualisation of the influencer economy: Development of a conceptual model

Katie L. Leggett¹ · Minna Lammi¹ · Juri Mykkänen²

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Abstract

The continued rise and integration of virtual influencers into social media have impacted the structure and financial flows within the influencer economy. This study identifies the diverse range of actors present within the influencer economy, along with an examination of the financial flows between these actors, the labour required from them, and the control held by them. This research paper subsequently derives a conceptual framework of the current influencer economy from existing concepts and real-world examples, bridging the two literature bodies of human and virtual influencer research and linking work across marketing, media studies, and economics. This paper highlights the important role that intermediaries play within the influencer economy, along with the significant control that brands can reclaim with the use of virtual influencers, as well as the pressure exerted by many actors within the economic structure onto human social media influencers.

Keywords Influencer economy · Virtual influencers · Social media · Disruptive technology · Conceptual model

JEL classification O

Introduction

In 2001, Theresa M. Senft coined the phrase ‘micro-celebrity’ to describe vloggers using technologies to amplify their popularity over the web (Senft, 2008). These social media stars draw an audience that they strategically maintain and enlarge through consistent communication and interaction (Marwick & Boyd, 2011). Essentially, social media influencers (hereafter influencers) produce online content and are also referred to as content creators, providing content to an audience seeking value on a particular topic (Audrezet et al.,

2020). The success of these individuals is usually recognised through the likes, shares, followers, and comments that their online profiles and content attract on social media platforms (Khamis et al., 2017).

Influencers make a substantial proportion of their profits from endorsing products and services for corporate brands. However, it was not until around 2012 that this social media content began to be produced for serious profit rather than as a hobby or for supplementary income (McCorquodale, 2019). This option has become increasingly attractive. Presently, there are more than 50 million people worldwide who identify themselves as influencers (Gagliese, 2022), motivated by the allure of brand endorsement deals and other financial gains (Aw et al., 2022) as well as the renown and social recognition that can be obtained.

The creator economy (Florida, 2022) is a vast ecosystem currently valued at around 250 billion USD and forecasted to increase to 480 billion USD by 2027, with influencer marketing seen as one of the key drivers (Goldman Sachs, 2023). The role of influencers in the creator economy encompasses social media marketing, testimonial endorsements, and product placement from people with expertise or social influence (Cong & Li, 2023). Influencer marketing, as an important part of the creator economy, is still relatively young and

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highly dynamic (Ye et al., 2021), with a current estimated value of 24 billion USD (Influencer Marketing Hub, 2024). While there is extensive literature on the creator or influencer economy, this tends to focus on the finer details rather than the overall structure of the economy itself, and, to the authors' knowledge, only Cong and Li (2023) and Kozinets et al. (2023) have addressed it from a broader perspective.

In recent years, machine-learning algorithms have profoundly impacted the digital landscape (Campbell et al., 2020; Davenport et al., 2020), bringing targeted and personalised communications from a niche into the mainstream. There has also been a significant integration of artificial intelligence (AI) within industries, with the intention of machine-human collaborations (Mirbabaie et al., 2021). Furthermore, companies have begun to utilise novel technology to create virtual influencers who can promote brands, interact with consumers, and imitate real-life encounters (Kietzmann et al., 2018). They can possess hyper-realistic humanlike appearances that, while attractive and rational from a business perspective, entail a darker dimension: a politics of artefacts (Winner, 1999), with disruptive effects on the market structure and actors. These involve using computer-generated characters in place of their human counterparts, resulting in a loss of work opportunities and reversing income flows, which is particularly damaging for those who rely on the income or visibility for social connection and affirmation. As part of the disruptive effect, the use of virtual influencers provides marketers and brands more control over their messages and creates new work opportunities for teams of content designers and programmers whom brands hire in replacement of human influencers (Kádeková & Holienčinová, 2018; Moustakas et al., 2020).

Virtual influencers have been growing in number and popularity over recent years (Koles et al., 2024). They are increasingly being sought by brands to undertake influencer marketing activities (Sands et al., 2022a). Research shows individuals are equally receptive to either form of influencer (Sands et al., 2022b) and can lead to the same outcomes, such as a positive effect of brand endorsement (Kim & Park, 2024) and a positive influence on brand attitude and purchase intention (Thomas & Fowler, 2020). Additionally, Gerlich (2023) found that virtual influencers are overall preferred over human influencers. Despite their growing popularity, little research exists on the surrounding contexts in which they can be an asset (Koles et al., 2024) and on the implications of their use (Thomas & Fowler, 2020).

Given the rise of virtual influencers and their impact on the influencer economy, it is apparent that a critical gap in knowledge remains with regarding their impact on the broader economic structure. Additionally, despite research on various aspects of influencer marketing, a comprehensive understanding of the influencer economy's present overall structure, including all human and virtual actors, remains

to be defined. To address these gaps in understanding and to shed light on the impact of virtual influencers, this paper seeks to illustrate how their emergence has reshaped the influencer economy. Specifically, we seek to explore the additional actors the integration of virtual influencers into the influencer economy has brought; examine the shifts in labour flows, such as in employment, opportunities, and roles; investigate the financial flows, such as changes in revenue streams and investment; and analyse the role of control and influence held by actors within the influencer economy.

This study follows a conceptual research methodology. Our research has been conducted on depictions of the influencer economy from both academic and industry literature accounts, and the model is derived from a combination of evidence from existing concepts and real-world examples (Hirschheim, 2008; Jaakkola, 2020). By adopting a conceptual research methodology, we provide a comprehensive understanding of the impact of the dual virtual and human influencer economy. Through this approach, we bridge gaps between two literature bodies, providing novel insight into the evolving dynamics of digital marketing and communications.

The study is structured as follows: first, a review of the literature related to the human influencer economy, the associated labour, financial considerations, and influence will be presented. Secondly, the same shall be applied to the virtual influencer economy. The resultant conceptual framework of the influencer economy is presented and discussed. Finally, we conclude and discuss limitations and implications for industry and future research.

Literature review

In this section, we examine the existing literature on the influencer economy, focusing on key aspects such as the structure, financial considerations, labour dynamics, and the control key actors hold. Through a review of both academic and industry literature, we aim to provide a detailed picture of its current state and the implications. The literature review is organised to explore and facilitate comparison between two literature bodies: the human influencer economy and the virtual influencer economy. Within each section, we discuss the actors, financial flows, labour dynamics, and influence and control, summarising findings to allow for easy comparison.

The human influencer economy

The roots of fame date back to ancient civilisations, as exemplified by figures such as Roman emperor Julius Caesar, with the contemporary concept of celebrity emerging in Europe in the mid-eighteenth century. This was epitomised by King

Louis XIV of France, who recognised the importance of self-publicity and wielded it expertly to inspire and influence (Barron, 2015). The impact of modern celebrity on culture is significant, with some authors (e.g., Frow, 1998; Rojek, 2001, 2012) drawing parallels with religion. For example, Frow (1998) compares Elvis Presley to a god. Stars such as The Beatles are recognised as having a significant impact on culture at both an individual fan and wider societal level, through their communications (e.g. lyrics) containing emotional and philosophical meanings, which shape attitudes and influence lifestyles and consumption (Coman et al., 2025). Ultimately, the alluring and impressive attributes admired by the public are part of the ‘celebritisation’ process, which involves entertainment, communications, publicity, representation, appearance, coaching, endorsement, and legal and business services industries (Turner, 2014).

This commoditisation of celebrity status underwent a major transformation in the twentieth century (Barron, 2015), with the influence celebrities hold over their fans leading to celebrity endorsement becoming a commonplace marketing tool. At the turn of the decade from the 1980s to the 1990s, influential scholars such as Grant McCracken (1989) and Roobina Ohanian (1990) developed core theoretical models to better explain the phenomenon. McCracken’s (1989) Meaning Transfer Model illustrates how cultural meanings flow from the celebrity to the brand they endorse and subsequently to the consumer, ultimately influencing consumers’ perceptions and behaviours toward the product. Ohanian’s (1990) Source Attractiveness Model emphasises the role of the celebrity’s attractiveness in the effectiveness of endorsements. While these models conceptualise how celebrities wield influence over their fans, newer literature has emerged to demonstrate the differing factors that shape the influence of social media stars.

In contrast to the extensive subcategories of celebrity industries, social media influencers achieve fame through careful self-branding and commercialisation on social media platforms (Khamis and Ang, 2017), relying on their ordinariness and accessibility as key attributes (Gerrath et al., 2024). Unlike traditional celebrities, the perceived authenticity presented by social media influencers makes them feel more approachable and compelling to imitate, while also allowing audiences to feel a greater connection to them (Venus Jin et al., 2019). Some authors argue that it is the commercialisation of the individual’s personal brand on social media that classifies them as influencers rather than online celebrities (e.g., Abidin, 2018; Mavroudis, 2018). Brands are increasingly opting to use these figures for endorsements, making this practice a fundamental component of digital marketing strategies (Liu & Lee, 2024).

The literature surrounding the influencer economy has seen a significant rise in activity during the 2020s (Joshi et al., 2023). This emerging field has attracted scholarship

on various aspects, including the effects on consumers (e.g., Pradhan et al., 2022; Kanaveedu & Kalapurackal, 2022; Trivedi & Sama, 2020; Djafarova & Rushworth, 2017), marketing strategies (e.g., Hudders et al., 2021), effectiveness of endorsement practices (e.g. Lou & Yuan, 2019), and platform-based studies (e.g. Hudders et al., 2021), especially on social media such as Instagram (e.g. Tanwar et al., 2023). This broad spectrum of research perspectives illustrates the multidimensional nature of the influencer economy and highlights the importance of examining the less explored area, the market structure, which this study addresses.

Actors

Extant research often explores specific aspects of the influencer economy rather than providing a comprehensive overview of its structure. The rare exemptions of Kozinets et al. (2023) and Cong and Li (2023) explore the wider ecosystem from a holistic business perspective. Cong and Li (2023) create a model using three actors: sellers (producers), influencers, and consumers. According to this model, actors interact through four sequential steps: influencer type and power are set, sellers make production decisions, sellers choose which influencers to hire in the labour market, and consumers decide which influencer to follow and consume the endorsed product.

However, industry perspectives, exemplified by McCorquodale (2019), offer a slightly different view of the monetisation. Here, the main actors are depicted as influencers, managers, and brands. It is argued that influencers strive to create content that reflects their passion for the topic and that their audiences will love. Monetary deals are accepted as unavoidable, enabling influencers to continue creating what they are enthusiastic about. Managers are portrayed as opportunists, meeting consumer demand, developing markets for their clients, or helping them deliver commodities to markets of which they are already a part. Abidin and Ots (2016) note the abundance of influencer agencies that have found their own monetisation of the influencer industry through the facilitation of partnerships. Accordingly, we recognise the core role of managers who work with established influencers and build up amateur influencers in the same manner as celebrity agents. Additionally, marketing managers working for brands, either in-house or outsourced to influencer agencies, coordinate campaigns and select influencer teams (Donawerth, 2024). Finally, brands are depicted as solely focused on selling products.

Closely related to agents and agencies are influencer incubators. They are known as ‘key opinion leader management companies’ (Stokerl-Walker, 2019) and ‘global internet celebrity incubators’ (Fernandes, 2024), and have successfully produced influencers for the e-commerce industry, with scouts searching social media to find amateur influencers

who they deem to have the skills required to make it as a professional influencer (Stokel-Walker, 2019). These incubators employ a business model that has proven successful predominantly in China and other parts of Asia but has yet to be embraced globally (Endeavour, 2022; Stokel-Walker, 2019). In this model, either individuals or teams are shaped by the incubator to meet the global market demand for influencers, usually to provide value to audiences in specialised areas (Fernandes, 2024).

As influencer marketing grows, consumer brands have also evolved, adding new actors whom Cong and Li (2023) term as 'sellers' and McCorquodale (2019) term as 'brands'. Big e-commerce platforms have seen the significance of influencer endorsement and have developed corporate influencer schemes (Abidin, 2018b). For example, Amazon has launched the 'Amazon Influencer Programme' (Amazon, 2024a), which enables selected influencers to earn commissions on purchases sold through their endorsement links, as well as the provision of a personal storefront URL within the Amazon domain. The Amazon Influencer Programme seeks to capitalise on the audience through additional direct traffic to Amazon and response to social media platforms that do not allow for extensive hyperlinking in posts (Amazon, 2024b).

In the same way that these incubators have emerged seeking to find and prime emerging talent for optimal commercialisation, influencer incubator brands have also arisen. These seek to take established influencers, who possess a strong personal brand and following, and utilise the personal brand capital in the creation of a new commercial brand. Here, the focus is on creating influencer-led commercial brands. For example, influencer brand incubator Founder-Six oversaw the launch of Ravie Beauty, a make-up brand with the influencer Allie Glines as the visible founder of the brand (Sandler, 2023).

Regarding brands, business-to-consumer (B2C) brands use influencers to endorse their products to their audiences. This is extremely attractive to brands, with 85% of marketers reporting they believe in its effectiveness (Influencer Marketing Hub, 2024). In line with this, the use of influencer marketing has increased rapidly and become a fundamental element of digital marketing strategies (Cabeza-Ramírez et al., 2022; Vanninen et al., 2022). The impact on marketing expenditure is highlighted by the Influencer Marketing Hub which states that nearly a quarter of marketers allocate more than 40% of their entire marketing budget on influencer marketing campaigns (Influencer Marketing Hub, 2024).

Business-to-business (B2B) brands have also resorted to influencer endorsement, with partnerships between brands and influencers notable in their industry (Zhao, 2024). While there is sometimes a misconception that influencers are only of use to B2C brands, a 2018 study found that nearly a quarter (22%) of B2B customers reported being

persuaded by influencers and almost three-quarters (72%) sought recommendations from them (Melzer & Zech, 2018). This reliance on B2B influencers is increasing in product evaluations (Cristafulli et al., 2022). These influencer-branded goods, 'merch' in industry parlance (Santora, 2023), are similar to those purchased by fans at concerts. Social media platforms encourage the production of this merchandise, as most have built-in e-commerce systems for merchandise and promote producers to their influencers (Reider et al., 2023; Song & Wildman, 2012). Brands can be subsequently divided into four actor categories: corporate influencer schemes, influencer incubator brands, B2C brands, and B2B brands.

Social media platforms are largely overlooked as an essential actor. Although recognised as fundamental through facilitating the social media network and through being a media outlet, they have also evolved and adapted. Most start by using an ad-based business model, offering influencers and audiences free use of the platform, and generating revenue from charging brands for advertising space. This ensures that the users of the platform can grow unhindered by any paywall. Once matured, it may capitalise further with the introduction of additional revenue streams (Li et al., 2024), such as the use of a subscription-based model or the introduction of a social media platform store. Fundamentally, social media platforms establish themselves as marketplaces, with the market offerings conceptualised as a bridge between influencers and audiences (Ørmen & Gregersen, 2022).

Given the prevalence of influencers, there are also emerging degree courses to train aspiring influencers, such as influencer marketing and social media bachelor's degrees at universities (Abidin, 2018b). South East Technical University in Carlow, Ireland, made headlines when it announced that it would be offering a Bachelor of Arts degree in content creation and social media, which aims to educate on how to maintain and monetise their audience (BBC, 2023; SETU, 2024). Another example is SAE Creative Media Education which offers a Bachelor of Arts degree in content creation and online marketing, a quality-assured programme awarded by the University of Hertfordshire (SAE Institute, 2024).

Taking the existing literature into account, we propose that brands of multiple forms play a much more prominent role in the influencer economy than recognised in the model by Cong and Li (2023) and argue for the importance of those managing and training as emergent actors in the modern influencer economy. Therefore, this paper will take forward ten actors in the influencer economy: influencers, consumers, social media platforms, agents and agencies, influencer incubators, B2C brands, B2B brands, influencer incubator brands, corporate influencer schemes, and higher education providers.

Financial flows

Now that the actors within the influencer economy model have been identified, the corresponding financial flows between these actors can be addressed. One of the most significant of these is the transaction costs associated with economic exchange, especially since the turn of the century has seen digitally mediated transactions rising (Greenstein et al., 2013). This encompasses data sharing and provision of access to digital communities for a fee, or in exchange for free access to products and services, alongside traditional transactions facilitated through digital channels (Nagle et al., 2020). Simultaneously, social media platforms tend to operate in a two-sided market setting, where the platform allows its users to interact for free and for the influencers to create and share content without charge (Seamans & Zhu, 2017), while platforms instead gather revenue from methods such as facilitating advertisement, selling fees or selling consumer data to data brokers (Nagle et al., 2020; Ørmen & Gregersen, 2022). Each social media platform has its own revenue model, which depends on progression through its lifecycle (Li et al., 2024) and approach to the market. Most platforms, once mature, opt for the additional revenue stream of subscriptions. Additionally, many social media platforms see an opportunity in their own e-stores.

Despite the need to seek additional revenue streams, social media platforms recognise the importance of the influencers who produce the content that provides the platforms' value to users. As the influencer economy has grown, innovative and competitive approaches to recognition and compensation have emerged between social media platforms (Cannon, 2023). Subsequently, each social media platform has differing monetisation requirements, as well as different levels of financial incentives offered to influencers. For example, YouTube offers those in its YouTube Partner Programme 55% of the revenue generated by advertisements shown on their video content (Rieder et al., 2023), while TikTok rewards creators with follower counts exceeding 100,000 with half of the revenue generated (Cannon, 2023). Furthermore, TikTok initially offered those in its Creator Fund program \$0.02 to \$0.04 per 1000 views (Keyser, 2024), which was then superseded by the Creator Reward program offering \$4.00–\$8.00 per 1000 views. This variance depends on factors such as engagement, viewer demographics, and the nature of content, meaning that a payment for a million views has been reported to differ by as much as \$900 across influencers (Oladipo, 2024).

Importantly, when influencers curate commercial content to polish their personal brand, they experience continuous traffic, solicit paid ad spaces, receive free market offerings in exchange for endorsements, and are approached and sponsored by companies, becoming what Abidin (2018b) calls 'commercial bloggers'. Specifically, it can be argued that

the 'brand endorsement status' is what signals the transition from internet celebrity to social media influencer (Mavroudis, 2018).

They earn revenue through four main avenues. The first route is from advertorials, or personalised advertising narratives seen in opinion editorial pieces (Abidin, 2018b), also known as brand endorsement. The number of brands paying influencers has increased. In 2022, 34% reported having paid influencers, 34.5% reported having chosen to pay using product samples, and the remainder opted for discounts and giveaways (Santora, 2023). The second route is through selling advertisement space on their social media platforms. The third route involves selling their market offerings, which can range from pre-used items to the creation of their own personal branded merchandise (Abidin, 2018b). The ease of merchandise creation encourages influencers to use their personal brands to generate branded market offerings, typically requiring little to no investment, with companies specialising in influencer merchandise and platforms for distribution (Santora, 2020). Social media platforms actively encourage influencer merchandise by providing integrated merchandise areas and promoting selected merchandise manufacturers (Reider et al., 2023; Song & Wildman, 2012). The fourth route is revenue from the platforms that pay creators for their content once they meet specific requirements, such as geographic location, number of followers, and other metrics (Sid, 2021).

The market value of influencers is usually representative of the number of followers they have, and the potential reach determines payments. Subsequently, influencers find themselves in a constant search for likes and followers (Hudders & Lou, 2022). Thus, with market-based transactions, there is a possibility of opportunistic behaviour occurring, which may obstruct or exploit a trading partner, becoming more likely as the cost of monitoring increases (Nagle et al., 2020). To achieve a higher perceived market value, influencers may resort to artificially inflating of their follower count and other social media platform-specific metrics by acquiring hundreds of 'fake' or 'dummy' followers from third-party accounts utilising bots. The prevalence of these social media bots is substantial, indicating that up to 30% of all followers across social media platforms may be fake (Roach, 2022). This artificial inflation can be acquired by the influencers quickly and inexpensively. Through online purchase, a hundred followers can be as little as 3 USD, and for influencers seeking even greater follower inflation, 1350 USD has been known to get 15,000 followers (Lieber, 2014). The use of fake followers, in what can be seen as fraudulent activity, has been estimated to cost advertisers 1.3 billion USD in 2019 (Graham, 2019). Sometimes, competing influencers, or individuals who dislike an influencer, may choose to 'target' them and purchase fake followers on their behalf to damage their reputation (Abidin, 2018a).

While commercial influencers can remain freelance, others sign up to management agencies. It is not only successful influencers who get signed by these agencies but also aspiring influencers who sign up to receive specialist training. These agencies negotiate work and contracts and conduct quality checks on sponsored social media content, in return taking a percentage of the earnings as commission (Abidin, 2018). Currently, the regulation on compensation levels for influencer management is vague. However, most managers expect compensation of around 10–30% commission, depending on the size of the deal and how it was obtained (Hacking, 2024; Moore, 2024). This commission-based business model is not restricted to influencer earnings but can also be calculated from the campaign budget.

Alongside the commission-based business model, there are four other business models agencies may use: the flat-fee model, whereby the agency fee is agreed pre-campaign; the retainer model, where the brand pays a monthly fee to the agency for continuous services; the performance based model, where the fee is calculated based on specific campaign goals and finally, a hybrid model can be adopted which blends a fixed guaranteed payment with a performance bonus if targets are met or exceeded (Hacking, 2024). Agency fees do not come solely from brands seeking to work with influencers; they may also pay their own retainer fees for the agency's services, ranging from \$800 to \$3000 a month for support, advice, and administration, with some agencies limiting this retainer for a set period to cover onboarding fees. There may be one-time fees to cover specific services, such as pitching to clients, which can be around \$800 per month. Additionally, there may be expenses such as travel costs for in-person meetings, events, subscription fees to tools or platforms, and legal and financial advisory services (Voss, 2024).

Influencer incubator companies employ a distinct business model compared to traditional talent and management agencies. Following the incubator model, one of the largest influencer incubators, Ruhnn, launched a \$125 million initial public offering and invested 2000 yuan (approximately \$290) per month into each of its 800 scouted influencers to direct an audience of 10,000 to their accounts. If an influencer managed to retain this audience, they were more likely to be one of the 5–10 influencers whom the company offered contracts (Endeavour, 2022; Stokel-Walker, 2019). For the selected few, these contracts and the dedicated webshop offered by the incubator can be very lucrative. A notable influencer from the Ruhnn incubator reportedly sold merchandise worth \$145 billion in a year from their personal webshop (Endeavour, 2022). The webshop provides a direct route for fans to purchase merchandise, keeping profits in-house without the need for third parties, thereby maximising profits for both the incubator and the influencer. The incubator also takes a commission on the influencer content.

Regarding the corporate influencer schemes, influencers earn commission rates and attribution for traffic driven to the site, which can be monitored by influencers to hone their skill. The commission rates can vary between product categories. For example, in the Amazon Influencer Programme, Amazon game purchases have the highest commission at 20%, whereas physical video games and consoles would only see a 1% commission income (Ayala, 2024). However, it is not just the direct audience of the influencer who may contribute to the commissions. With the integration of influencer programmes into large e-commerce sites, users can now see influencer content when they search and browse, with the influencer earning 'onsite earnings' if the user clicks on their content (photos, videos, or livestreams) and subsequently makes a qualifying purchase (Amazon, 2024b). These programmes are also limited to a select group of influencers, one of the main metrics taken into consideration for eligibility being the number of followers. For the Amazon Influencer programme, the influencer must have a YouTube, Instagram, TikTok or Instagram account, and applicants are advised to have at least 1000 followers. Amazon also considers the influencers' engagement with their followers and assesses the quality of the content they produce, as well as its relevance to Amazon's products (Ayala, 2024; Jones, 2023).

Labour

For these financial movements to occur, multiple labours are required from the actors. Within the influencer economy, multiple hirings take place, and the influencers are in competition. This competition subsequently leads to a large volume of unpaid work performed by the influencers (Yallop, 2022). The competitive nature of the influencer economy is understood, particularly by influencers themselves, many employing a range of techniques, such as algorithm optimisation (Cotter, 2019) and the formation of alliances between influencers known as cliques (Abidin, 2018a) to increase the visibility of their content to the audience. The audience also provides unpaid visibility labour to feed the algorithms set in place by the social media platforms (Abidin, 2015). In this case, visibility labour consists of sharing, commenting, interaction, and amplifying activities (Fuchs, 2021a). In both instances, the visibility labour provided by the audience is key to the sales of sponsored commodities. Digital advancements have created a tendency to replace labour with technology, which has led to new forms of free labour. It emphasises the powerful vision of an influencer economy where anyone can be a celebrity and have great opportunities for success and wealth (Fuchs, 2021b).

While successful influencers can earn a comfortable and, in exemplary cases, a luxurious living from their influencer careers, the majority still only aspire to such success. These

individuals remain part of the ordinary working class, trying to earn a living in the same way as precarious freelancers—as seen in the gig economy (Fuchs, 2021a). Therefore, it can be argued that they are providing aspirational labour (Duffy, 2017). Influencers conduct this aspirational labour to get professional recognition (Fuchs, 2021a). Moreover, this aspirational labour is not just conducted by influencers, as the social media audience also conducts attention-generating activities. This leads to a considerable amount of unpaid work being provided by influencers and consumers.

To capitalise on the significant volume of labour required from influencers, management agencies have adapted and evolved with the fast-changing digital landscape. Full-service marketing agencies manage social media marketing campaigns from ideation to conclusion, covering their entire duration (Geysler, 2021). The original management agencies effectively operated as intermediaries between client brands and influencers. Subsequent agencies began to contract influencers exclusively to their own agencies, as well as encompassing freelance influencers. Whereas the traditional agency model saw client brands seeking them, modern agencies also pitch appropriate influencers from their books to clients (Abidin, 2018). The diversification of services provided by these agencies extends to product placements, building of social followers, and promotional activities such as giveaways, hashtags, and creative campaigns (Geysler, 2021). The presence of influencer agents and agencies adds additional bureaucracy to the system (Yallop, 2022).

Influencer incubators differ from management agencies in the significant resources they put behind the influencers (Stokel-Walker, 2019). They operate in the same way as traditional modelling scouts, but instead of searching the streets for potential talent, they scroll social media for promising beginners (Endeavour, 2022). For example, Ruhnn scouts 800 promising influencers each month and retains around 5–10 of them, who are selected after undergoing tests to check their marketing skills (Endeavour, 2022; Stokel-Walker, 2019). An example of a test is for the influencer to successfully identify what the best-selling products worn and held in a range of 100 images (Stokel-Walker, 2019). The influencer incubator conducts labour in the forms of guidance from support teams, months of intense training, the provision of tests, influencer-dedicated webshops, and the facilitation of opportunities (Endeavour, 2022).

There are also associated labours involved in finding the appropriate influencers to work with a brand. B2C and B2B brands may use external influencer management agencies or opt to employ in-house influencer marketing (Donawerth, 2024). Influencer incubator brands not only identify market opportunities for product demand, but they also ensure they select the right influencer or team of influencers for the market opportunity. Brands offering corporate influencer

schemes differ in that the influencers tend to apply to them. However, this requires different labour in the form of processing applications and vetting the recruited influencers. In addition, there is the maintenance of the scheme, along with the additional URLs connected to their site, and the support they need to provide.

Influence and control

The need for influencers to connect with their audience as ordinary people (Marwick, 2015) leads to a blurring between their professional endorsement content and personal content, creating tensions in influencer capitalism (Fuchs, 2021b). This impacts not only the amount of time influencers need to invest in content creation and engagement with their audiences, but also the nature of the content produced, as they must provide more personal details than they would perhaps prefer. There are also difficulties for brands in managing content created by influencers, as the influencer needs to be largely in control of the material and subsequent marketing messages (Audrezet et al., 2020; Martínez-López et al., 2020; Vanninen et al., 2022). This shifts the power of the brand narrative from the brand to influencers. Despite this, the content-driven commerce system typically requires brands to embrace all content, not just content created by themselves, emphasising the need for them to engage with marketing strategies that contain a mixture of internal and external content (Nealon, 2022). Knowledge relating to the management of this remains scant (Vanninen et al., 2022). Consumers, for their part, are turning to influencers for inspiration, information, and reassurance before they purchase products. Hence, the discovery of the brand has been democratised across these content creators (Nealon, 2022). Consequently, this loss of brand control increases the risk in terms of brand management.

Useful information for transactional relationships can be obtained in the online footprint left by individuals and organisations on social media, which creates formal and informal reputations and reduces interpretive uncertainty (Weber & Mayer, 2014). Conversely, the lack of physical accountability in online interactions allows for potential misrepresentation of an influencer's personal brand, which may cause brands to unwittingly partner with individuals who may lack authenticity—or who commit transgressions—and could potentially suffer reputational damage through association (Sands et al., 2022a). Indeed, the allure of lucrative brand partnerships has led to a rise in falsity in influencer marketing (Dans, 2019), highlighting the inadequacy of relying solely on informal reputation (Allcott & Gentzkow, 2017).

Obtaining influencers through agencies can present a way for brands to access influencer marketing with added assurances. The contracts arranged by agents and agencies also

weaken the influencers' control over the content produced on their social media channels (Moore, 2024). Guld (2023) goes as far as to describe this addition as an institutionalisation of the digital attention economy, where consumers' attention is purposefully evermore precisely exploited and focused on selected influencers using integrated social media technologies and metrics.

The institutionalisation of the digital attention economy is also exacerbated by influencer incubators that promote the use of contracted influencers over independent ones (Stokel-Walker, 2019). In the media, the attitudes towards influencer incubators can be highly critical, with some referring to them as 'influencer farms', thus dubbed due to the volume of influencers working on selling products from single rooms in the incubator's building. This has led to the 'systematic cultivation of influencers, often en masse, with the primary goal of maximising reach without necessarily aligning with brand values.' (Davison, 2023). The incubator model has reduced influencers' autonomy, for example, through exclusive portrait rights being written into contracts. This means that influencers must seek permission for a third party to use their images commercially so that the company can access their social media accounts and e-commerce (Stokel-Walker, 2019). Scripts and marketing points provided to influencers have also raised concern about the authenticity of their recommendations to the audience (Davison, 2023).

Alongside this, corporate influencer schemes such as the Amazon Influencer Programme seek to retain potential profit within their own systems, allowing only products sold on Amazon to be recommended on the influencer's store. While the influencer can recommend products on their social media channels that are not sold on Amazon, they may be dissuaded from doing so or recommended an alternative to maximise their commission-based earnings through the programme. In addition, the Amazon Influencer Programme encourages Amazon seller collaboration with these influencers, furthering the Amazon online ecosystem (Jones, 2023) and weakening influencers' autonomy.

Additionally, as influencers' perceived popularity and value are largely determined by their follower count and engagement measured in likes and comments, Cotter (2019) observes that influencers' pursuit of business through visibility resembles a game created around rules encoded within social media platform algorithms. The algorithmic ranking determines what and whom individuals see on social media, effectively prescribing participatory norms to be rewarded with visibility (Bucher, 2012). The algorithms are usually not transparent outside of the company, with concerns that influencers may be able to participate in 'gaming the system' should they know the full details of what produces the desired outcome (Pasquale, 2015).

To improve their perceived popularity and gain more control of the system, influencers are known to purposefully

post selfies with others, which are intended to showcase the influencer's status and social network. Taking this concept further, posting social media content, including a set group of people, enables cliques to form, strengthen each other, and compete against other cliques. These social media cliques operate similarly to offline cliques. They are social groups that send subtle cues, such as who is excluded, who is no longer accepted, who has gained clique status, and thinly veiled gossip and criticism. Followers of influencers feed into this structure through speculation (Leaver et al., 2019). Therefore, these group selfie posts are used in what Leaver et al. (2019) refer to as a 'network surfacing strategy' by which influencers signal their social status and social standing in specific communities.

Also, as the use of bots to generate more followers has become less dependable and increased the risk of 'punishment' by the social media platforms if caught, some influencers have turned to 'pods' to manipulate the algorithmic system. Pods are private group messages where influencers can share new posts, allowing others to interact with them. The rules are that before a new post is shared, the other pod members must interact with the most recently shared post. This will accelerate engagement and account growth rate, thereby increasing the likelihood that the algorithm will choose others to see the post. Unlike cliques, pods have rigid rules for the participants to follow and often consist of strangers (Melotti, 2017). Interaction within the pod is more akin to a business arrangement rather than social support (Cotter, 2019). As the size of their following ordinarily determines an influencer's market value, these informal cliques amplify the influencer's content. The average size of a clique is 10–20 influencers who can then combine their follower networks and exposure. These informal pacts must remain subtle as the systematic gaining of followers is socially frowned upon (Abidin, 2018).

Table 1 summarises the components of the human influencer economy.

The virtual influencer economy

As the digital landscape continues to evolve, one notable innovation in the influencer economy is the emergence of virtual influencers, which are fictional, crafted entities that disseminate information and interact with audiences through digital channels (Mouritzen et al., 2024; Sands et al., 2022b). Virtual influencers possess enormous creative flexibility, able to be created to any desired specification and with any personal narrative (Mouritzen et al., 2024; Mustak et al., 2023). This has led to the classification of virtual influencers into spectrums and taxonomies, illustrating how, on one side, virtual influencers can be convincingly human and on the other side, can also appear otherworldly (Gambetti & Kozinets, 2024; Mouritzen et al., 2024). In addition, regardless

Table 1 The influencer economy**The influencer economy**

Estimated Value in 2024: \$24 billion (Influencer Marketing Hub, 2024)

Top influencers such as MrBeast reaching 563,600,000 followers across social media platforms (Walsh, 2025)

Actors	Agents/Agencies, B2C Brands, B2B Brands, Consumers, Corporate Influencer Schemes, Higher Education Providers, Influencers, Influencer Incubators, Influencer Incubator Brands, Social Media Platforms
Financial flows	<ul style="list-style-type: none"> • Brands → Social Media Platform via <i>data and access purchasing and via purchasing advertisement</i> • Brands → Influencers via <i>advertorials and via purchase of advertising space</i> • Brands → Agents/Agencies via <i>influencer marketing contract fees and retainers</i> • Consumers → Social Media Platform via <i>subscription and via platform shops</i> • Consumers → Brands via <i>the purchase of advertised or endorsed goods and via purchasing of influencer-branded goods or used items</i> • Corporate Influencer Schemes → Influencers via <i>commissions</i> • Influencers → Social Media Platforms via <i>influencer-branded good sales commission</i> • Influencers → B2B Brands via <i>influencer-branded goods and via payment for bot followers</i> • Influencers → Agents/Agencies via <i>commissions, retainers, one-time fees, and expenses</i> • Influencer Incubators → Influencers via <i>investment, contract, facilitation, and maintenance of personal webshop</i> • Influencers → Influencer Incubators via <i>commissions</i> • Influencers → Higher Education Providers via <i>course fees</i> • Influencers Incubator Brands → Influencer via <i>contract</i> • Social Media Platforms → Influencer via <i>royalties</i>
Labour	<ul style="list-style-type: none"> • Agents/Agencies: contract, project, support and brand management • Brands: hiring of influencer marketing managers or external influencer agencies, influencer recruitment, contracts, campaign management, content monitoring • Consumers: visibility labour, aspirational labour • Corporate Influencer Schemes: processing of applications, vetting of influencers, maintenance and support • Higher Education Providers: recruitment, support, teaching and assessing • Influencers: content creation, social media channel management, personal brand management, visibility labour, aspirational labour, bureaucratic labour • Influencer Incubators: recruitment, support, training, testing, provision of influencer dedicated webshops and finding of opportunities • Influencer Incubator brands: market analysis, sourcing of influencers, contracts, management and support • Social Media Platforms: provision and maintenance of the platform, inclusive of accounts and platform stores, support for users
Control	<ul style="list-style-type: none"> • Agents/Agencies → Brands via <i>intermediating deals and gatekeeping of brand offers</i> • Agents/Agencies → Influencers via <i>intermediating deals and accountability of contracts, reduction of control over content and gatekeeping of brand offers</i> • Agents/Agencies → Consumers via <i>the increased institutionalization of the digital attention economy</i> • Consumers → Influencers via <i>demand for content</i> • Corporate Influencer Schemes → Influencers via <i>limiting the scope of what is recommended/endorsed</i> • Corporate Influencer Schemes → Consumers via <i>limiting the scope of what is recommended/endorsed and incentivising the promotion of certain products</i> • Influencers → Consumers via <i>endorsement of market offerings</i> • Influencers → Brands via <i>influence over content and brand narrative, as well as control over their personal brand representation</i> • Influencer Incubators → Influencers via <i>exclusive portrait rights, rights to account and e-commerce access, and limiting of authenticity and control</i> • Social Media Platforms → Influencers via <i>algorithms</i>

of the design choices for the virtual influencer's appearance and personal narrative, they can also produce content that depicts either realism or virtuality (Arseyan and Mirowska, 2021; Leggett & Davies, 2025).

The integration of these digital entities has introduced a disruptive element, enabled by advancements in technology and particularly artificial intelligence, which has made them more efficient, interactive, and increasingly prevalent in social media marketing (Ameen et al., 2022; Sands et al., 2022a). This trend has sparked growing academic interest,

especially since 2022, with research focusing on three main areas: their effectiveness with consumers, business attractiveness, and their advantages and limitations (Łaszkiwicz & Kalińska-Kula, 2023). Despite this rising attention, understanding of virtual influencers remains limited, and existing literature often treats them separately from broader influencer studies.

Nevertheless, early findings suggest that audiences can be just as receptive to virtual influencers as to human ones. In fact, some studies indicate that virtual influencers

generate nearly three times more engagement than their human counterparts (Baklanov, 2019; Sands et al., 2022a). They are often perceived positively by consumers, offering meaningful brand benefits (Thomas & Fowler, 2020). This receptiveness may stem from the personification of virtual influencers, which encourages users to apply social norms and etiquette in their interactions with them, much like they would with real humans (Feine, 2019; Nass & Moon, 2000). These reactions highlight the potential of virtual influencers to occupy a unique yet relatable space within the influencer economy.

Actors

Virtual influencers are a combination of production and social media management (Ho, 2022), and, therefore, they are part of a production system that requires skilled professionals to develop and maintain them, such as designers, producers, copywriters, artists, animators, photographers, and videographers. Due to this extensive production system, many brands choose to hire virtual influencers from agents/agencies. Virtual influencers can be independent from other brands and be used to endorse any brand that hires them, while others are designed to be dedicated to a particular brand. Significant examples of brands with dedicated virtual influencers include Lu of Magalu and Barbie, who were the first and second most followed virtual influencers in 2022, respectively (Hiort, 2022).

Lu of Magalu identifies as Brazilian and is globally recognised (Hiort, 2022; Wierson, 2021). Her TikTok account is reportedly the fastest-growing TikTok account in the world, having gained over 1 million followers in the first month (Wierson, 2021). Not only is Lu used as an online-salesperson and tech expert (reminiscent of an in-store salesperson) for Magalu's online store, but she also acts as a stakeholder (contributing to the company's annual report), a spokesperson (providing interviews and social media content—both for the brand and as an influencer), and as an endorser (both for the brand and even hired out to third party brands) (ibid). Lu endorsing products for third-party brands demonstrates the appeal for brands working in a business-to-business transaction for social media endorsement content.

The Barbie brand uses its product as the centrepiece of many of its social media platforms. However, on YouTube, Barbie exists as a fully-fledged virtual influencer who frequently vlogs about her life in an educational manner (Hiort, 2022). The YouTube account boasts over 10 million subscribers, and the 87% surge in sales in the first quarter of 2021 is attributed to its success (Mew, 2022). The ability of Barbie to consistently blog the constructed narrative to the audience enhances the brand image and adds to the personification of the brand.

Recently, it has been reported that there are 150 confirmed virtual influencers, with many more unverified. This figure is also expected to increase as brands become more aware of their benefits, following the constant increase in influencer marketing expenditure (Ho, 2022). This consistent rise in active virtual influencers on social media platforms has prompted the non-profit Truth in Advertising (TINA) to recommend that the definition of endorsement should also explicitly include endorsement from virtual influencers (Lawn, 2021).

Financial flows

Brands choosing to use virtual influencers can significantly reduce the number of financial flows. Brands may choose to outsource virtual influencer content, forming contracts with agents or agencies. While those who choose to develop their own in-house virtual influencers may see high initial internal outlay before dropping to maintenance level expenditure (Sands et al., 2022a; Mileva, 2025), all remain within their own entity. For those who manage to produce successful content that leads to social media platform payments, these payments would either go to the virtual influencer's agent or agency or the brand, depending on the management system.

Labour

The addition of virtual influencers as actors in the system can lead to the forsaking of their human counterparts and thus reduce labour for human influencers and their agents/agencies. External virtual influencer management labour moves to agents and agencies. Brands using in-house virtual influencers also need to employ teams with the required skills to manage the virtual influencer's brand and their content. These teams must have a creative vision for the virtual influencer's brand and their narrative, both from a technical perspective and in relation to their anthropomorphism and personification (Moustakas et al., 2020; Kadekova and Holiencinova, 2018; Leggett & Davies, 2025).

The creation of a virtual influencer can take between eight and twelve weeks and covers all aspects from their aesthetics, the computer-generated imagery (CGI) process, and the overall strategy. Due to the flexibility of virtual influencers to transcend physical boundaries, they can be depicted in either real-world or digital locations (Arsenyan & Mirowska, 2021; Leggett & Davies, 2025). For content depicting the virtual influencer in real locations, the photoshoot phase takes a set number of days at a location to shoot live scenes. If a virtual setting is sought, this can take two to three weeks to create static images, and for video content, it can take longer with modern gaming engines allowing for creation in around four weeks. Once this initial virtual influencer and launch content have been created during the production

Table 2 Additional components introduced by virtual influencers to the influencer economy

Components introduced by virtual influencers to the influencer economy	
Estimated Virtual Influencer Market Value in 2023: \$4.58 billion (Grand View Research, 2023)	
Top virtual influencers reaching 32 million followers (Hiort, 2022)	
Additional actors	Brand Managed Virtual Influencers, Virtual Influencer Agents/Agencies
Additional financial flows	<ul style="list-style-type: none"> • Brands → Virtual influencer agents/agencies via <i>influencer marketing contract fees and retainers</i> • Social Media Platforms → Brands via <i>royalties on brand owned and managed virtual influencer accounts</i> • Social Media Platforms → Virtual Influencer agencies/agents via <i>royalties on virtual influencer accounts</i>
Additional labour	<ul style="list-style-type: none"> • Brands: Hiring of external virtual influencer agencies and contract or recruitment and maintenance costs of dedicated in-house team, campaign management, and content monitoring • Virtual influencer agents/agencies: contract, project, support, and brand management
Control	• Brands → Consumers via <i>increased control of narrative</i>

period, their active online presence must be carefully maintained, with fresh content planned, scheduled, and created, along with upgrades and maintenance (Keegan, 2022).

Influence and control

In the fight for visibility, as seen with the formation of cliques and pods by human influencers, collaborations between virtual influencers are also seen. For example, Imma regularly posts with Zinn, aka ‘Plusticboy’, who is her ‘brother’. Zinn has a girlfriend called Ria, also created and managed by Aww Inc. These relationships supplement the virtual influencer’s personal brand narratives adding novelty and depth to their subsequently produced content (Hiort, 2021). These connected posts also show engagement from other virtual influencer accounts—for example, in a recent post, Imma can be seen after a ‘fight’ with Ria, with Zinn and Ria both tagged in the post, which has received engagement from Rozy. This mirrors the tactics used by human influencers utilising the platform’s algorithm. It also demonstrates which are approved in that virtual social group. Additionally, these interactions demonstrate that virtual influencers can have the same depth of narrative as their human counterparts.

Collaborations between human and virtual influencers also exist. Often, for this to be possible, a human is used onto which the virtual influencer’s face is superimposed in the creator’s studio; however, a combination of deepfake technology, AI, and robotics may also be used (Fyler, 2022). An example is the post made by Imma who appears ‘physically’ with artist and influencer Brittany Boyd, who, just like Imma, is also known for pink hair and love of the Japanese art style and anime (Barnett, 2019). This partnered post enables Imma to connect with the real world, while providing Brittany with a connection to virtual innovation—something integral to her online persona, as indicated by her profile reading ‘Interdimensional’ (as accessed on 02/02/2023).

This is a good example of joint value being created for both personal brands from a human and virtual influencer collaboration.

However, these two types of influencers are different in their agency. Human influencers can use their own judgement and moral conscience, whereas virtual influencers are products of their creators and the brands (Leonard, 2016; Hu et al., 2022). The prevalence of management agencies indicates a shift in the market towards more traditional marketing activity and consultancy process. The brands regain more control (Rodrigo-Martín et al., 2022) and maintain the balance in favour of their interests, while the increased democracy of the online environment erodes.

Table 2 summarises the additional components introduced to the influencer economy.

Conceptualisation and discussion

Brands are increasingly utilising virtual influencers (Sands et al., 2022b). Subsequently, it is vital for the model of the influencer economy to sufficiently recognise this innovative addition and the disruption it causes. Brands utilise a range of new technologies that have changed the labour landscape (Brynjolfsson & McAfee, 2012; Leonhard, 2016; Frey & Osbourne, 2017; Huang & Rust, 2018), transforming the influencer economy into a more complex system that seeks to restore greater corporate control.

Importantly, from a societal aspect, virtual influencers are already known to enjoy a large following, with the most followed in 2022, such as Lu of Magalu, having over 32 million fans, and Miquela Sousa (aka Lil Miquela) having over 3 million fans across their social media platforms, to name a few (Hiort, 2022). This indicates their strength and, by extension, their reach to extensive audiences. This can lead to a world where we see a stronger brand voice and a decreased citizen voice on social media, leaving individuals

at the mercy of the brand's powerful messages. Considering that 93% of millennials report trusting and relying on online reviews, and 50% of consumers take some action after reading a positive review on social media, this could have a significant impact (Santora, 2023).

The changes that the presence of virtual influencers has had on the influencer economy will now be discussed in the same sequence as previously: the actors, the financial flows, labours, and finally the influence and control.

Actors

When virtual influencers are used instead of humans, this has a significant impact on the actors involved. This is particularly evident in cases where brands choose to build and manage their own virtual influencers in-house, which can simplify the process to just three actors: the brand, the social media platform, and the consumers. When an agency or agent is contracted, this includes an additional actor; however, due to the technological skills required, other third parties that rely on networking and management skills often find themselves at a competitive disadvantage. Other actors, such as corporate influencer schemes, may eventually find relevance if they extend and adapt their offers to entice virtual influencer agents/agencies to better utilise virtual influencers. Higher education providers could offer courses to teach students the skills required to develop and maintain virtual influencers.

While human influencers can now be bypassed with the alternative use of their virtual counterparts, they have shown adaptation in relation to collaborations in campaigns, albeit in only a select number of cases. Additionally, in terms of the workforce required, while management of people is reduced, there is an additional requirement for managing technology. From this perspective, the impact is not entirely negative but rather inspiring and pushing for new collaborative ways of working alongside machines. This can represent the 'missing middle' whereby human and machine hybrid activities are utilised for their corresponding strengths in a symbiotic relationship (Daugherty & Wilson, 2018). In this hybridised middle, the human's role is to maintain the machines by training, explaining, and sustaining them, and the AI's role is to amplify, interact, and embody. We are yet to see if the current harmony within the influencer economy model can continue to evolve with mutual benefit as technology advances further.

Financial flows

Addressing the financial flows within this economy, the addition of virtual influencers can significantly simplify processes for brands, especially with brand-owned and managed virtual influencers allowing direct flow of any revenue

generated back from social media platforms and keeping expenditure in-house. When an agency/agent is employed by a brand, this simply shifts the flow from managers/trainers to those who specialise in virtual influencers. Additionally, when the virtual influencer agency/agent is used, it is ordinarily agreed that the agency retains any royalties obtained from the social media platform. These financial flows are illustrated in Fig. 1, the virtual influencer impacts depicted with purple. The prior existing flows are depicted with blue arrows for consumer and black arrows for commercial flows, these flows are as explained in Table 1.

Labours

Regarding labour, although the use of virtual influencers employs professional creators and managers, this is a small group of specialists, with a small number able to create and manage numerous virtual influencers (Leaver et al., 2019). The human influencers and those utilising their brands, who are not fluent in the required technologies, nor have the equipment or the capacity, find themselves replaceable, and this renders the system unable to support a vast number of influencers, either those who are influencers by career or who use it as a supplementary income. One could argue that freelancers would suffer more as they do not have the security that comes with formal employment. The insecurities within economies, such as the influencer economy and gig economy, compound challenges for these individuals who might fall outside of social security systems in many Western welfare states.

Regarding the potential for job replacement, Huang and Rust (2018) theorise that job replacement from technology occurs fundamentally at the task level, rather than at the job level. In the early stages of transition, manual tasks such as supermarket cashiering were automated; however, with the progress of artificial intelligence, it is now also analytical tasks that are being gradually overtaken. This leaves jobs with little intuitive and empathic skill requirements susceptible to full replacement. When applied to the context of social media influencers, the power of virtual influencers can vary, with some replacing the lower-level tasks, such as the image of the post itself, and others utilising AI being able to autonomously respond to audience comments, write their own captions, and generate their own content (Kumar et al., 2019; Travers, 2020).

Influence and control

The fundamental design of the virtual influencers optimising AI allows them to become attuned to their followers' personality traits and mannerisms. The ability to use this information to interact and reason with them in a deeper, connected way is a true advantage for brands (Kietzmann

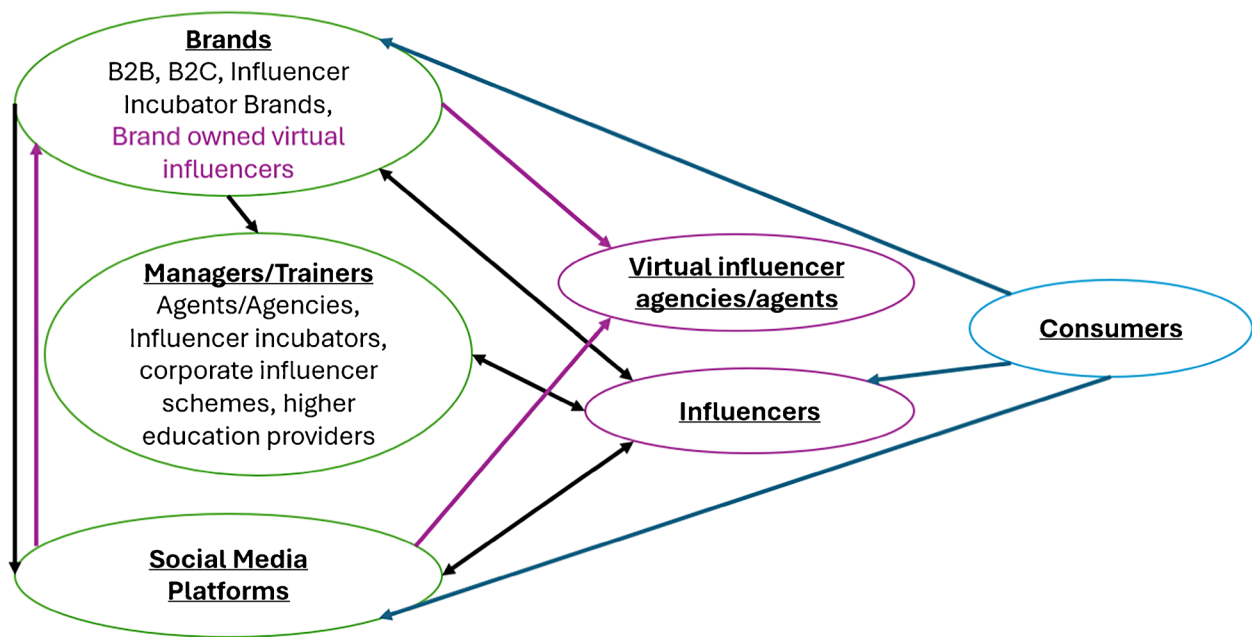


Fig. 1 Conceptualisation of the influencer economy by financial flows

et al., 2018; Thomas & Fowler, 2020). With the power of machine learning, AI virtual influencers can learn from every touchpoint with the audience (Thomas & Fowler, 2020), allowing brands to have meaningful and intimate conversations with consumers (Campbell et al., 2020). In instances where virtual influencers are brand dedicated, they can operate both as a personification of the brand and as an endorsing fan (Leggett & Davies, 2025). In addition, two key advantages of virtual influencers for organisations are, first, that they pose a lower risk than collaboration with real influencers, as they are less likely to be involved in a scandal (Sands et al., 2022a; Thomas & Fowler, 2020) or in some other way to act counter to corporate policies. Second, they cost less (Sands et al., 2022a), although they require a substantial initial outlay after which their maintenance can be minimal. However, as Thomas and Fowler (2020) explain, the perceived benefits may be unfounded, as some virtual influencers have been known to commit transgressions either due to their human management or through AI autonomy, and often cost more than human influencers who have the same number of followers.

Therefore, as Leaver et al. (2019) reason, virtual influencers are unlikely to replace every human influencer, but they are likely to be one of the most important types of influencers to emerge. We suggest that one of the biggest drivers towards the further prevalence of virtual influencers in the influencer economy is the control that they allow brands to reclaim, particularly if the brand obtains a virtual influencer unique to their brand, especially considering the ability of virtual influencers to transcend reality and depict reality and

virtuality in their content (Arsenyan & Mirowska, 2021), allowing brands to optimise the advantages of typical daily-life influencer strategies and occasionally turn to strategies of fantasy and surrealism (Leggett & Davies, 2025). Additionally, agencies are more likely to offer consistent and competitive rates to brands than the wildly varying demands of human influencers.

Conclusion

This paper has filled the gap left by previous research on influencer economy and demonstrated that this competitive field—the different actors, financial and labour flows, and the forms of control—has not been fully identified. We addressed the gap by constructing a comprehensive model of the influencer economy and describing its dynamics, including virtual influencers and the changes they have brought. As Bossio et al. (2019) observed, a substantial body of work exists in the field of social media; however, less attention has been paid to the vital role played by human intermediaries such as managers and technical experts. This paper develops a new understanding of how different actors, including intermediaries, as well as financial and labour flows, interact in influencer and virtual economy.

Jaakkola (2020) argues that conceptual papers such as this provide supplementary value to theory. This study has bridged academic theories surrounding the influencer economy and linked work across the disciplines of marketing, media studies, and economics. The conceptual nature

enabled the modelling of influencer economies in their respective formats, unrestricted by the demands of empirical generalisation (Vargo & Lusch, 2004) and the data-related limitations of limited empirical data being available in this area (Yadav, 2010). As is the aim of model-type conceptual papers, we contribute to the extant knowledge by delineating virtual influencers and their relationship to the influencer economy (Jaakkola, 2020; MacInnis, 2011). The work provides an understanding of how the presence of virtual influencers changes the structure of the influencer economy itself (MacInnis, 2011).

This study makes a valuable contribution by addressing the labour dimension of the influencer economy model, an essential consideration regarding how the presence of both human and virtual influencer agencies affects other actors, such as human influencers and their income, and the position of the audience as a source of labour. As noted earlier, influencer incubators require influencers to work long hours in harsh conditions. They also tend to recruit influencers who fit into a specific beauty standard, which impacts not only other influencers in the market but also the millions of viewers consuming these ideals (Davidson, 2023). For virtual influencers, these are not problems; they are available continuously, do not tire or require breaks, and don't have problems with beauty standards.

Furthermore, a famous definition made by Daniel J. Boorstin (1992) implies that all that is required to be a celebrity is being well known for being well known. This illustrates the shift in celebrity culture from its origin to where it becomes increasingly possible for individuals to gain fame without the requirement of a traditional celebrity talent, achievement, or social status (e.g. nobility). It can be argued that digital platforms have further facilitated this shift, with social media stars gaining popularity due to their perceived ordinariness. It can also be argued that the addition of virtual influencers signals an effort by the celebrity industries to reclaim control and reduce the opportunity for monetisation from the layperson. In this sense, it can be seen as a dehumanisation of the celebritisation process.

Influencers often dedicate a significant amount of time to creating content, building and maintaining their personal brands, and engaging with their online audience. Therefore, the influencer's job is a set of activities in a defined process (Marwick, 2015). Despite these potential costs, Sanders (2022) maintains that being an influencer is a sustainable career path for individuals to pursue and constitutes an authentic job in the labour market. Influencers benefit the economy in the same way traditional marketing jobs do, by advertising market offerings (Sanders, 2022). This has proven very lucrative for successful influencers, as the accumulation of content, visibility, likes, followers, clicks, and comments translates into economic capital, leading to influencer capitalism (Fuchs, 2021a). It is important to note

that not all influencers enjoy a return on their efforts. Those who are unsuccessful or uncommercialised receive no return on investment while continuing to produce content in the hope of future pay prospects (Duffy, 2017).

Moreover, as the digital environment is shaped by the norms of the offline world (Aw et al., 2022), and machine learning algorithms are fed by online content, the content produced by human influencers remains fundamental to the success of virtual influencers. What can be seen is the resilience and entrepreneurial spirit of human influencers; they are determined to utilise the system to achieve their aspirations, to please the social media platform's algorithms, work cooperatively in cliques and pods, and work alongside and with virtual influencers on campaigns. However, virtual influencers may have stripped human influencers of the power over their work that they had.

Directions for future research

Further research should examine the concrete effects of major technological changes on the structure of the influencer economy, particularly when appropriate empirical data becomes available. Comparative research could explore the relationships brands have with influencer agencies, examining the differences between human and virtual influencers, to understand how each type of influencer is managed and how this affects accessibility and limitations for brands. This knowledge would help advertisers and brand managers determine motivational factors for choosing either a human influencer or a virtual influencer.

Additionally, future research should seek to test the conceptual model presented in this paper. This could include a qualitative review with the actors identified to further understand the intricacies within the model and to ascertain the strength and importance of each connection and variable flow. Alternatively, test cases could be used to illustrate the interactions, verify completeness and validity, and further identify the actor's needs.

Managerial implications

Despite the conceptual nature of this study, several managerial implications arise from a deeper understanding of the connections and flows within the influencer economy. Firstly, although the presence of virtual influencers can significantly reduce the number of actors involved, agencies can adapt by expanding their books to include connections with virtual influencer creators or expanding their own offerings with the addition of staff who possess the skills and investment in the required technologies. Additionally, they may seek to promote collaboration between their influencers

and virtual influencers, thereby better embedding these new technologies into their networks.

Secondly, as higher education providers begin to incorporate social media influence into their course offerings, these institutions must be mindful of this shift in the landscape. Therefore, they would need to embed skills in areas such as CGI and in various artificial intelligence software.

Furthermore, regulators and social media platforms need to recognise the significance of the virtual influencer presence within the ecosystem. While some regulators such as TINA have taken steps to try and mitigate any negative effects of undisclosed virtual influencer endorsement on consumers, other regulatory bodies need to be mindful of the influence these digital entities have on their audiences, particularly when the virtual influencer has taken on a human appearance, and it is not clear to some consumers that they are a digital commercialised figure.

Ultimately, from a societal perspective, brands need to consider the implications of their choice of endorser. While brands can benefit from the creative flexibility provided by virtual influencers, along with the branding elements they can provide, such as a sense of innovation and modernity, in cases where the brand seeks to highlight social concern, they should be mindful of the subsequent effect this has on both financial distribution and control among the actors within the influencer economy.

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