

## **Redefining Boundaries: The Impact Of Autonomous Intelligent Entities On The Power Dynamics Of Influencer Marketing**

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**Abstract**

*Technological evolution has introduced Autonomous Intelligent Entities (AIEs) into the heart of influencer marketing, precipitating a significant transformation in the power relations between brands, human influencers and consumers. This theoretical article aims to uncover how AIEs are reconfiguring the traditional value chain of influencer marketing, proposing a new paradigm in market interactions. Through a critical analysis based on theories of power and influence, as well as the study of human-computer interaction, the emerging role of AIEs as agents of change is explored. It addresses how these entities not only facilitate more efficient operational processes, but also create new forms of authority and influence, challenging the hegemony of human influencers and altering consumer expectations and behaviors. This paper identifies three main axes of change: the autonomization of influencer marketing, personalization on an unprecedented scale, and the redefinition of authenticity. It argues that AIEs, by operating in capacities ranging from content curation to direct interaction with consumers, are establishing new criteria for effectiveness and success in influencer marketing. In addition, the ethical, social and regulatory implications of this paradigm shift are discussed, highlighting the need for innovative governance that balances technological innovation with human rights and values. Finally, this study proposes a conceptual model that maps the emerging power dynamics, providing insights for academics, marketers and policymakers on how to navigate this new ecosystem. By filling theoretical and practical gaps, our analysis makes a significant contribution to the literature on influencer marketing, offering a robust basis for future research on the impact of EIA on marketing and beyond. This work not only elevates academic understanding of the intersection between AI technology and marketing, but also guides strategic practice in an era defined by artificial intelligence.*

**Keywords:** Autonomous Intelligent Entities (AIE), Influence Marketing, Personalization, Digital Ethics, Power Dynamics.

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**I. Introduction**

The intersection between Artificial Intelligence (AI) technology and influencer marketing marks a turning point in companies' communication and sales strategies, introducing a new player onto the digital scene: Autonomous Intelligent Entities (AIEs). Defined as AI systems capable of making decisions and carrying out actions independently, without the need for direct human intervention, AIEs represent not just a technological evolution, but a veritable revolution, reconfiguring the power dynamics between brands, human influencers and consumers (Vinogradov, 2022; Jiang et al., 2022). This article delves into this transformation, exploring how AIEs are redefining power relations in the influencer marketing ecosystem, with a critical look at the ethical, social and regulatory implications of this change.

The main research question guiding this study is: "How are Autonomous Intelligent Entities changing the power dynamics between brands, human influencers and consumers in influencer marketing?" To answer this question, the article aims to: (1) examine the role of AIEs in the influencer marketing value chain, (2) analyze the implications of these changes for power relations within the marketing ecosystem, and (3) discuss the ethical, social and regulatory consequences of this new dynamic.

The existing literature, as pointed out by Kaplan & Haenlein (2020), has focused on the capabilities and operational benefits of AIEs, while Casaló, Flavián, & Ibáñez- Sánchez (2020) highlight the impact of digital influencers on consumer behavior. However, a significant gap remains in the understanding of how EIA reconfigure traditional power relations in influencer marketing. This study aims to fill this gap by contributing to the literature with a critical analysis of the emerging power dynamics between brands, influencers and consumers, mediated by AIEs.

The emergence of AIEs in influencer marketing raises questions about autonomy, consent and privacy. As highlighted by Floridi (2016), the autonomy of AIEs challenges traditional notions of responsibility and ethics in marketing. In addition, data privacy becomes an even more prominent concern, as discussed by Zuboff (2019), who criticizes the massive collection of personal data under the guise of innovation. This paper addresses these ethical concerns and seeks to delve into the need for transparency and fairness in EIA-mediated marketing practices, echoing concerns raised by Burrell (2016) about the opacity of algorithmic systems.

This work delves into a little-explored area of the intersection between AI and influencer marketing. Therefore, this study seeks to fill an important theoretical gap, providing a critical reflection on the far-reaching consequences of adopting AIE in influencer marketing, emphasizing the need for an ethical and responsible approach to this disruptive technological tool.

The structure of this theoretical article is designed to facilitate a comprehensive and in-depth understanding of the topic. Initially, a typological analysis of the influential entities that populate the hypervirtual ecosystem is developed. This is followed by a review of the fundamental theories of power and influence within the context of marketing. It then discusses the technological evolution of AIEs and their growing role in influencer marketing, highlighting the transformation of brands' communication strategies and

interaction with consumers. A critical analysis of the changes in power dynamics is at the heart of the article, examining how AIEs are redefining the roles and expectations of human influencers and consumers. Finally, the ethical, social and regulatory implications of this new configuration are addressed, proposing future directions for research and practice.

**II. Theoretical Reference**

**Eia As Mediators Of Influence: A New Category Of Influencers?**

In today's digital marketing landscape, AIEs are emerging as a new force capable of influencing consumers' purchasing decisions (Saini, 2022). This evolution implies reconsidering the traditional typology of influencers, extending it to include human opinion leaders and other non-human entities capable of exerting influence (Yu et al., 2024). Katz and Lazarsfeld's (1955) seminal research on opinion leaders and the diffusion of innovations provides a starting point for this discussion, allowing us to explore how EIAs can fit into this spectrum of influence.

The evolution of influencer marketing reflects technological and social changes in consumer patterns. From human opinion leaders, recognized before the 1900s for their ability to influence purchasing decisions through their expertise, social standing or charisma, to future technological developments that promise to further revolutionize the field, the trajectory of influence marketing is marked by significant innovations (Saini, 2022; Yu et al., 2024).

Katz and Lazarsfeld (1955), with their Two-Step Communication Theory, and Rogers (1962), with the Diffusion of Innovations Theory, were pioneers in studying the impact of opinion leaders, highlighting the importance of these individuals in the flow of information within social networks and in shaping public opinion.

With the early 1900s, brands and corporate entities began to use their brand authority to influence consumers directly, a move that Aaker (1991) described as fundamental in strengthening brand identity and relationship marketing. The emergence of digital influencers in the late 2000s marked another significant shift, with content creators using digital platforms to influence specific audiences, a phenomenon that Schouten and McAlexander (1995) linked to perceived authenticity and community building.

The 2010s saw the rise of AIEs and virtual influencers, marking the beginning of an era of mass personalization and new forms of engagement, as described by Pine (1993) and explored from the perspective of social presence theory. Bots and conversational assistants have also emerged as important mediators of influence, highlighting the importance of human-computer interaction theories and conversational design principles in automating customer service and personalizing the user experience (Chen et al., 2022; Vinogradov, 2022).

Table 1 illustrates the evolution and impact of influencers, from human opinion leaders to future technological developments, highlighting their decades of emergence, definitions, operating ecosystems, impacts and implications, as well as additional theoretical considerations. This analysis highlights the diversity and complexity of the field of influencer marketing, and also underlines the importance of studies that address the transformations underway and those yet to come, as suggested by the emerging content in technology and society pointed out in Table 1.

**Table 1 - Evolution and Impact of Agents of Influence.**

Category	Decade of emergence	Definition	Operating Ecosystem	Impacts and implications	Additional Theoretical Considerations
Human Opinion Leaders	Before the 1900s	Individuals who influence purchasing decisions through expertise, social position or charisma.	Social networks, blogs, face-to-face events.	They have a direct impact on purchasing decisions, setting trends and legitimizing products.	Katz and Lazarsfeld (1955) - Two-step communication theory; Rogers (1962) - Diffusion of innovations theory.
Brands and Corporate Entities	Early 1900s	Companies that use their brand authority to influence consumers directly.	Digital advertising, corporate websites, social networks.	Strengthening brand identity, direct engagement with consumers.	Aaker (1991) - Branding and relationship marketing.
Digital Influencers	Late 2000s	Content creators who use digital platforms to influence a specific audience.	Social media platforms, YouTube, blogs.	Personalization of marketing, creation of consumer subcultures.	Schouten and McAlexander (1995) - Perceived authenticity and community building.

EIA	2010s	AI systems that can analyze data, predict behavior and generate personalized content.	Digital environments, metaverse, e-commerce platforms	Mass customization, new forms of engagement and interaction.	Pine (1993)- Mass personalization; G DPR for ethics and regulation in AI.
Virtual Influencers	2010s	Computer-generated digital characters who have a presence on social networks and are able to influence like human beings.	Social networks, video platforms, advertising campaigns.	They create emotional connections with the public and explore new market niches.	Social presence theory; Horton and Wohl (1956) - Parasocial relationships.

In the context of the metaverse, the entities of influence shown in Table 1 take on new dimensions and possibilities, requiring a reassessment of marketing strategies and the theories that underpin them. Opinion leaders and human digital influencers, for example, find in the metaverse an expansion of their reach and capacity for engagement through avatars and virtual events, which highlights the importance of authenticity and social presence in digital environments. Brands and corporate entities, in turn, have explored the metaverse to create immersive and interactive brand experiences, such as Nike with the creation of Nikeland in Roblox, demonstrating the potential of branding in virtual environments (Torres et al., 2019; Santiago & Castelo, 2020).

Virtual influencers like Lil Miquela transcend the boundaries of the real and the virtual, engaging followers on multiple platforms and challenging traditional notions of authenticity and influence (Byun & Ahn, 2023). AIEs, with their ability to generate personalized content and predict behavior, are becoming key to creating personalized experiences at scale in the metaverse, highlighting the convergence between technology, personalization and user experience (Saini, 2022). Bots and conversational assistants are adapting to act as guides or virtual salespeople, broadening the scope of automation and human-computer interaction. These developments reflect the adaptive and innovative capacity of influencers in digital marketing and point to new directions in terms of engagement strategies, personalization and community building in the metaverse (Vinogradov, 2022; Chen et al., 2022; Yu et al., 2024).

From a theoretical point of view, according to the theory of mass personalization (Pine, 1993), AIEs have the potential to offer individualized experiences for consumers, thus increasing their influence. In addition, the ubiquitous nature of AIEs in the digital environment extends their reach, offering new opportunities to engage with diverse audiences (Vinogradov, 2022).

Authenticity, widely recognized as a fundamental building block for effective influence in marketing, faces complex challenges when applied to AIEs. Schouten and McAlexander's (1995) research highlights authenticity as a crucial element in consumer dynamics, especially with regard to subcultures, where the genuine connection between brands and consumers can significantly strengthen engagement and loyalty. In the universe of AIEs, the question of authenticity is challenging, since these entities do not have human experiences or emotions. However, examples such as H&M's chatbot, which personalizes fashion recommendations for its users based on their interactions (Precioso, 2019) demonstrate how AIEs' ability to produce content aligned with consumers' individual preferences can mitigate the absence of traditional authenticity.

This approach suggests a redefinition of authenticity, one that relies less on emotional genuineness and more on the accuracy and relevance of the personalization offered (Vinogradov, 2022). This new strand of authenticity, grounded in personalization and relevance, paves the way for significant managerial implications: brands can now leverage EIA technology to develop more affective and effective marketing strategies, even in the absence of direct human interactions. Thus, rather than replacing emotional authenticity, EIA complements it, creating a paradigm in which deep personalization and content relevance become the new metrics of authenticity in digital marketing (Dai, 2020; Murphy et al., 2021).

Furthermore, the effectiveness of AIEs in acting as autonomous influencers constitutes a pertinent field of research, particularly in the light of the theories of social influence outlined by Cialdini (1984). Cialdini (1984) identifies six fundamental principles of persuasion: reciprocity, commitment and consistency, social proof, authority, sympathy and scarcity. By applying these principles to the context of AIEs, it is possible to discern how these technologies can be employed to influence consumer decisions effectively.

For example, AIEs can apply the principle of social proof by collecting and analyzing consumer behavior data to generate personalized recommendations that appear to be endorsed by a large number of users (Murphy et al., 2021). This is evident in the way platforms such as Netflix use algorithms to suggest content based on what is popular among users with similar tastes (Nogueira, 2022), effectively applying digital social proof to influence viewing choices.

As for authority, AIEs programmed to simulate expert knowledge or to use data to back up their suggestions can be seen as more trustworthy and persuasive. IBM Watson, for example, offers data-driven insights that can aid decision-making in a range of areas, from healthcare to the financial sector (Sullivan, 2023), reinforcing the perceived authority of these AIEs.

Transparency in how AIEs are programmed to interact with users, as well as guarantees of privacy and data security, can increase consumer acceptance. In addition, the advanced personalization that AIEs can offer, closely aligning with consumers' individual preferences, can offset potential misgivings regarding a lack of humanity or emotional empathy (Vinogradov, 2022).

From a managerial point of view, companies developing and implementing EIA for marketing and sales should carefully consider how these technologies apply Cialdini's (1984) principles of persuasion, as well as the importance of building and maintaining consumer trust. This involves optimizing EIA's technical capabilities for personalization and predictive analytics, as well as focusing on the ethical consideration of how these interactions affect brand perception and long-term consumer loyalty.

As the emerging role of AIEs in the influencer marketing landscape is explored, the revolution that redefines who, or what, can be considered an influencer becomes clear, as well as the underlying dynamics of power and influence in the digital space. AIEs can predict consumer behaviour and generate personalized content, establishing a new paradigm of authenticity and persuasion, based on mass personalization and analytical precision (Chen et al., 2022).

This advance promises to profoundly alter marketing strategies, requiring an understanding of how power is built, negotiated and maintained in the digital universe. As we delve deeper into the complexities of digital marketing, we see that the rise of AIEs as mediators of influence is just the tip of the iceberg. The real question lies in how these changes are reshaping the ecosystems where brands, consumers and technologies interact, creating new challenges and opportunities to understand and mobilize power effectively in the virtual environment.

### **III. Power And Influence In Digital Marketing**

Understanding the dynamics of power and influence in digital marketing is fundamental to deciphering the interaction between brands, influencers and consumers. The concept of power, historically associated with the ability to influence the behavior of others, finds in the digital environment the opportunity for its expansion and reconfiguration (Kaplan & Haenlein, 2010). The classic theories of power and influence, as outlined by French and Raven (1959), which identify bases of power as coercive, reward, legitimate, reference and expertise, are now challenged and expanded in the digital context.

In the digital environment, influence manifests itself through the ability to affect the perceptions, attitudes and online behaviors of an audience (Kozinets, de Valck, Wojnicki, & Wilner, 2010). Digital influencers, armed with social platforms, use these power bases to shape purchasing decisions, brand perceptions and consumer norms (Jin, Muqaddam, & Ryu, 2019). The emergence of AIEs, with their ability to generate content, interact with users and learn from past interactions, introduces a new layer of complexity to the traditional power dynamics in marketing.

The transition to digital has broadened the spectrum of referral power, previously limited to human influencers, to include AIEs capable of simulating social relationships and exerting influence on consumers (Van Dijck, 2013). This digital reference power, complemented by the algorithmic expertise of AIEs, reconfigures influencer marketing strategies, making them more personalized, interactive and effective. Expertise, another power base, is amplified by AIEs through big data analysis, enabling a deep and predictive understanding of consumer behavior (Boyd & Crawford, 2012).

Furthermore, AIEs challenge the notion of legitimate power in digital marketing. Traditionally associated with formal or institutional authority, legitimate power in the context of AIEs derives from their ability to offer consistent, secure and reliable user experiences, which are fundamental to building digital trust (Tussyadiah, 2020). The legitimacy of AIEs as influencers is therefore built on their effectiveness and reliability in delivering desired marketing results.

However, the use of EIA in influencer marketing is not without ethical challenges, especially in relation to coercive and reward power. The ability of AIEs to personalize offers and recommendations can inadvertently manipulate consumer preferences, raising questions about consumer autonomy and informed consent (Martin, 2019).

The mass personalization made possible by AIEs offers unprecedented opportunities for influencer marketing, while raising questions about consumer privacy and individuality (Zuboff, 2019). In addition, the ability of AIEs to analyze large volumes of data in real time and provide behavioral insights allows for more precise audience segmentation and content personalization than ever before (Huang & Rust, 2018).

This capacity for customization increases the power of brands to influence, while at the same time transforming consumer expectations, which come to expect increasingly personalized and relevant consumer

experiences. However, this expectation is accompanied by a growing concern about privacy and data security, as consumers become increasingly aware of how their information is collected, analyzed and used (Martin & Murphy, 2017).

The intersection between AIE technology and influencer marketing also highlights the evolution of the power of expertise. AIEs, with their learning and AI capabilities, have almost unlimited potential for analyzing trends, predicting consumer behavior and optimizing marketing strategies. This algorithmic expertise redefines the notion of authority in the digital space, shifting the focus from human influence to the precision and efficiency of machines (Davenport, Guha, Grewal, & Bressgott, 2020).

However, the effectiveness of AIEs as digital influencers depends on their ability to generate trust among consumers. Authenticity, considered a pillar of effective influence in digital marketing, faces new challenges in the context of AIEs. The creation of AI-generated content that is indistinguishable from human content raises fundamental questions about the nature of authenticity and trust in the digital age (Spence, 2020).

Therefore, as AIEs continue to evolve and become more deeply integrated into influencer marketing strategies, it is crucial that academics and practitioners consider the opportunities offered by these technologies, as well as the ethical and social challenges that accompany their adoption. The need for clear, transparent and fair regulations has never been greater, aiming to ensure that the power of AIEs is used responsibly, promoting consumer welfare and maintaining the integrity of the digital space (Taddeo & Floridi, 2018).

In this way, the evolution of the virtual context and digital platforms has broadened the horizons of marketing, allowing brands and individuals to reach global audiences. This democratization of influence highlights the growing importance of technology as a mediator of power relations between brands, consumers and now, non- human entities.

This context leads to the emergence of new players in the marketing ecosystem, whose ability to process information and interact with users in real time redefines consumer expectations and experiences. The introduction of these autonomous entities promises greater personalization and efficiency, as well as raising questions about the nature of influence and authenticity in the digital age, signalling a new chapter in the evolution of influencer marketing, where AI becomes an active participant, challenging traditional paradigms of power by developing disruptive innovations in engagement and communication.

#### IV. Rise Of Autonomous Intelligent Entities

The rise of AIEs marks a turning point at the intersection of technology and influencer marketing, reflecting unprecedented advances in AI, natural language processing and big data analysis. Theorists such as Pine and Gilmore (1999), when discussing the experience economy, anticipated a world where personalization and customer experience become central, an omen that finds its realization in the capabilities of AIEs. The ability of these technologies to learn, adapt and make decisions independently redefines the effectiveness of marketing strategies, challenging brands to rethink how they engage with their audiences. For example, the implementation of AI- based chatbots by companies such as Sephora to offer personalized beauty consultations highlights how big data analysis can be used to create more meaningful and personalized interactions with consumers (Collins, 2023).

Similarly, the development of virtual assistants such as Amazon's Alexa demonstrates the ability of AIEs to influence purchasing decisions through real-time interaction based on vast repositories of user data and preferences (Leikas et al., 2019). These examples illustrate the practical applicability of the theories discussed by Kaplan and Haenlein (2019), which emphasize the need to humanize AI to create deeper connections with consumers, and highlight the managerial implications for brands in the digital age: the need to integrate advanced technologies into their marketing strategies to maintain relevance and competitiveness. Thus, Table 2 demonstrates that the emergence of AIE in influencer marketing is not only a testament to technological progress, but also a call for brands to explore new frontiers in creating authentic and engaging consumer experiences.

**Table 2 - Chronology and Impact of Emerging Technologies on InfluenceMarketing.**

TimeFrame	Technology	Impactson InfluencerMarketi ng	Ethicaland StrategicChallenge s	TheoreticalContrib utions	Practicalimplications
1950	Turing'sproposition ofAI	Theoreticalfoundati on forEIAdevelopment	Reflection on thesimulation ofhumanthoughtby machines	Basisforunderstandi ng Aanditspotential	Initial inspirationforautomationand AInmarketing
Until2019	Advances in AI,machine learning,PLN, big dataanalysis	Improvedselection ofinfluencers,person alization ofcontent, precisemeasurement of campaigneffectivene	Concerns aboutauthenticity andtransparency inbrandcommunicat ion	Rationalefordevelop ing EIAand its applicationinmarket ing	Moreeffectiveandpersonalize dmarketingstrategies

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2018	Research by Huang & Ruston AI in services marketing	EIA as active participants in the delivery of personalized consumer experiences	Questions about active EIA participation and extreme personalization	Arguments about the transformation of the essence of services marketing by AI	Implementing EIA for personalized consumer experiences
2012	Boyd & Crawford's discussion on big data	Using large volumes of data to segment audiences and create personalized strategies	Debate on privacy, data security and ethical analysis of information	Critical perspectives on the role of big data in the digital society	Data-driven marketing approaches and trend analysis
2020	Authenticity debate by Spence	Challenges to the notion of authenticity with EIA content creation	Ethical concerns about consumer manipulation and clarity of communication	Reflections on the value of authenticity in brand communication	Guidelines for the ethical use of EIA in content creation
Contemporary	Regulations such as GDPR	Increased concern about the privacy and security of data collected by EIA	Continuous challenge to existing regulations due to the rapid evolution of EIAs	Discussion on ethical responsibility and protection of consumer privacy	Adapting marketing practices to regulatory privacy requirements
The near future	Transforming the work of influencers	Change in the nature of influencing work due to collaboration with EIA	Questions about the future of work and the impact on the influencer industry	Theories on automation and its impact on the labor market	Developing skills for effective collaboration with EIA
Future Research	Application of EIA in marketing research	Platform for testing theories and developing new approaches based on data	Need for responsible technological innovation and consideration of social implications	Arguments in favor of the importance of digital tools in marketing research	Valuable insights for academics and professionals through the simulation of purchasing behaviors

As shown in Table 2, the trajectory of influencer marketing over the decades reveals an evolution marked by significant technological innovations. Alan Turing's proposition of AI in 1950 established the theoretical foundation for the development of EIA, instigating ongoing reflection on the simulation of human thought by machines, a basis for understanding the potential of AI that inspired the first forays into automation and AI in marketing (Turing, 1950; Byun & Ahn, 2023).

In 2018, research by Huang and Rust (2018) solidified the role of AIEs as active participants in the delivery of personalized consumer experiences, raising questions about the active participation of AIEs and extreme personalization. This work argued that AI is transforming the essence of services marketing, facilitating the implementation of AIEs for personalized consumer experiences (Huang & Rust, 2018).

As we move into 2019, we see the maturation of advances in AI, machine learning, natural language processing (NLP), and big data analytics, which have been instrumental in improving influencer selection, personalizing content, and measuring the effectiveness of marketing campaigns with unprecedented precision. These developments have brought with them significant ethical and strategic challenges, especially in terms of authenticity and transparency in brand communication, requiring a rationale for the development and application of EIA in marketing (Kaplan & Haenlein, 2019).

The discussion on big data by Boyd and Crawford (2012), and the debate on authenticity by Spence (2020), illustrate the contemporary challenges facing influencer marketing, from the ethical management of vast volumes of data to the preservation of authenticity in the age of AIEs. These discussions bring to the fore concerns about data privacy and security, as well as underlining the need to adapt marketing practices to regulatory privacy requirements, as exemplified by the GDPR (Boyd & Crawford, 2012; Spence, 2020).

In terms of trends, the transformation of influencers' work due to collaboration with EIA represents a significant shift in the industry, indicating the need to develop skills for effective collaboration with EIA. This scenario suggests a rich field for future research, where the application of EIA in marketing research can offer a platform for testing theories and developing new data-driven approaches, highlighting the importance of digital tools in marketing research (Kaplan & Haenlein, 2020).

As we witness the rise of AIEs on the influencer marketing scene, an inflection point is emerging where the interaction between technology and humanity is redefining marketing strategies, as well as the very structures of power and influence that

underpin the digital ecosystem. This transformation, driven by the ability of AIEs to analyze data, predict behavior and personalize content, proposes a new era of engagement and interactivity. However, as these autonomous entities become increasingly influential mediators in the relationship between brands and consumers, critical questions are emerging about how the power dynamics is being reconfigured in this new context.

The boundaries between human content creators and artificial intelligences are beginning to blur, challenging our pre-existing notions of authenticity, influence and the very essence of brand communication. This scenario encourages us to further explore how AIEs are altering traditional relationships in influencer marketing, signaling a future where understanding and navigating power dynamics will require innovative strategies.

## V. Redefining Relationships: EIA And The Power Dynamics Between Brands, Influencers And Consumers

The era of AIEs is ushering in a new phase in influencer marketing, redefining the existing power structures between brands, influencers and consumers. This technological revolution transforms engagement strategies, placing AIEs as protagonists capable of analyzing consumer behaviors with unparalleled precision, predicting trends and generating content that resonates in a personalized way with the target audience. This evolution, as explored by Huang and Rust (2018), highlights the potential of AIEs to act not only as optimization tools, but as influential entities that can initiate dialogues and shape brand perception in previously unexplored ways. The introduction of these autonomous capabilities challenges traditional paradigms, suggesting a collaboration between artificial intelligence and human intelligence to create a richer and more engaging marketing experience. This advance puts into perspective the need for adapted ethical and regulatory approaches, as discussed by Floridi and Cowls (2019), to ensure that the implementation of AIEs benefits all stakeholders in a fair and transparent manner, paving the way for a new era of digital interactions.

An example of this transformation can be seen in Microsoft's implementation of the "Tay" chatbot, which, despite its initial challenges, illustrates the potential of AIEs to engage with the public in complex and humanized ways (Moreira, 2016). Similarly, L'Oréal used AIE to create an augmented reality experience that allows consumers to virtually try on different make-up products, significantly amplifying their influence on the consumer's purchasing decision (Marr, 2019). These real-life examples highlight the ability of AIEs to perform tasks previously exclusive to humans, as well as the need to re-evaluate marketing strategies to incorporate these technologies ethically and effectively.

Brands now face the challenge of integrating AIE into their strategies in a way that complements and extends human influence, rather than simply replacing it. This requires an understanding of the capabilities of EIA, as well as a consideration of the ethical implications of its implementation, as discussed by Spence (2020), who stresses the importance of authenticity in the digital age. Managing consumer perceptions of the authenticity and transparency of AI-generated content becomes crucial, as does navigating the evolving expectations of human influencers, whom many see as both tools and competitors.

Historically, brands exercised almost absolute control over marketing messages, orchestrating how, when and where their messages would be broadcast. This paradigm began to change with the rise of social media, which, according to Kaplan and Haenlein (2010), relocated the center of gravity of marketing from companies to consumers, promoting an era of direct interaction and engagement. The introduction of EIA accelerated this democratization, empowering influencers and consumers to actively participate in the co-creation and dissemination of content.

A concrete example of this transformation can be seen in the e-commerce platform Alibaba, which uses EIA to generate personalized product descriptions based on consumers' shopping interests, allowing brands and consumers to co-create the shopping experience (He, 2021).

This evolution occurs because AIEs offer the ability to process and analyze data on a previously limited scale, allowing for a deeper understanding of consumers' wants and needs (Yu et al., 2024). Thus, brands can adapt more quickly to changes in consumer behavior, while influencers can adjust their content strategies to align more closely with their audience's preferences.

Moreover, this shift reflects a growing demand for authenticity and personalization in digital interactions, with consumers looking for brands and influencers that understand their individual needs and communicate in a genuine and relevant way. On the other hand, influencers, who have gained their position of power through their ability to generate authentic content and engage followers, now find themselves in a position where AIEs can mimic this authenticity and accurately analyze/predict audience preferences. Kietzmann et al.



(2018) explore how technology is redefining the concept of authenticity online, suggesting that AIEs can play a crucial role in shaping perceptions of authenticity and trust.

While this empowers consumers by offering them products and experiences more in line with their individual preferences, it also calls into question how much personal data is being shared and how this data is used to influence their purchasing behavior. Zuboff's (2019) discussion of surveillance capitalism highlights that the accumulation and analysis of personal data by EIAs can lead to a form of market influence that crosses traditional ethical boundaries. However, the consequences of not adequately addressing these issues can be significant, including the erosion of consumer trust and increased regulatory scrutiny. Therefore, the managerial implications of the rise of EIA in influencer marketing requires companies to take a balanced approach that prioritizes ethics in data collection and use, transparency in marketing practices and adherence to privacy regulations, while seeking to maximize the personalization potential offered by these advanced technologies.

In addition, the power relations that are being redefined by AIE make way for a new era of transparency, where the ability to influence will be based on the intersection between AI and human intelligence. Denegri-Knott and Molesworth's (2010) research into the digitalization of consumption suggests that the interaction between digital technologies and consumers is creating new forms of value and meaning, a concept that is amplified by the integration of AIEs into influencer marketing.

Westin's (1967) work on privacy and freedom sheds light on the delicate balance that must be maintained between using data for personalization purposes and safeguarding individual rights to privacy, a debate that has become even more pertinent in the digital age. Westin (1967) argues that privacy is fundamental to personal autonomy and human dignity, establishing a theoretical framework that highlights the critical need to protect private spaces from unauthorized intrusion. This argument takes on a new dimension in the context of the rise of EIA and data-driven marketing practices, where the massive collection and analysis of personal information can easily transgress ethical boundaries if not properly managed.

In practice, the implications of this balance are profound for organizations navigating the boundary between offering highly personalized services and maintaining consumer trust. The implementation of regulations such as the GDPR and the CCPA (California Consumer Privacy Act) reflects a legislative response to the concerns raised by Westin (1967), requiring companies to be unprecedentedly transparent about how consumer data is collected, used and shared.

Leading companies in the use of advanced technologies, such as Amazon and Google, exemplify how personalization can be achieved while respecting user privacy. For example, Amazon uses recommendation algorithms to personalize the online shopping experience, while providing users with robust controls over their personal information. Similarly, Google offers detailed privacy options to allow users to control the type of data that is collected about them.

Westin's (1967) contribution to the discussion on privacy established a theoretical basis that continues to influence modern management practices, highlighting the need for companies to develop data strategies that not only comply with current regulations, but also respect the fundamental values of privacy and freedom. Therefore, at the intersection of personalization and privacy lies an ongoing challenge for organizations: finding a path that respects consumers' individual rights while exploiting the potential of data to create rich and meaningful user experiences.

In addition, the growing ability of AIEs to create content that is indistinguishable from that created by humans raises questions about authenticity and trust. The concept of "parasocial interaction", discussed by Horton and Wohl (1956), becomes increasingly relevant in this context, as consumers form relationships with non-human entities. These parasocial interactions with AIEs can fundamentally alter the nature of influence in marketing, challenging traditional notions of credibility and persuasion.

Pierre Bourdieu (1986), in his theory of cultural capital, sheds light on the complexity of social and economic interactions, suggesting that differential access to advanced technologies such as AIEs can deepen the gaps between different socio-economic strata. Concrete examples of this disparity can be seen in the limited access to devices and high-speed internet connections in low-income communities, which consequently restricts the ability of these groups to take full advantage of the innovations provided by AIEs in personalized consumer experiences. Thus, digital inclusion emerges as an ethical imperative, essential for democratizing access to the benefits offered by AIEs in influencer marketing, ensuring that these advances are shared more equitably among different segments of the population.

In addition, the ethical adoption of EIA in influencer marketing demands regulatory and ethical guidelines, guided by governance that puts consumer welfare and market equity at the heart of its concerns (Vinogradov, 2022). The transition to more personalized, data-driven marketing strategies reflects a breakthrough in how companies can meet consumers' needs and desires more effectively and efficiently.

This move towards personalization at scale promises to enhance the consumer experience and challenges organizations to rethink their approaches to customer engagement. As we move into this new phase, it becomes indispensable to further explore how EIA can be harnessed to unlock this competitive edge, highlighting the need for a deep understanding of the mechanisms through which personalization can be achieved and optimized, while ensuring that consumer integrity and privacy are maintained.

## VI. Customization At Scale: The Competitive Edge Provided By Eia

The transition to the digital age has ushered in an era of innovation in marketing strategies, where personalization at scale has become a competitive differentiator and a central requirement for the success of brands. AIEs are protagonists of this transformation, redefining influencer marketing through the use of advanced algorithms capable of analyzing vast data sets to identify patterns of consumer behavior, predict future preferences and personalize messages with unprecedented precision and efficiency. Kaplan and Haenlein (2019) highlight the importance of AI in marketing, pointing out how the ability to personalize at scale can radically transform the interaction between brands and consumers, offering a richer and more engaging experience.

In the context of the metaverse, this capacity for personalization takes on a new dimension. AIEs allow brands to create immersive and highly personalized experiences that transcend the traditional boundaries of digital marketing. This evolution in marketing strategies, empowered by AIEs, requires brands to re-evaluate their approaches to consumer engagement. Fjeld et al. (2020) discuss the ethical implications of AI, highlighting the importance of considering consumer privacy and autonomy when developing personalized marketing strategies. Thus, the ability of AIEs to offer personalization at scale represents an opportunity for brands to connect with their audiences in more meaningful and effective ways, especially in the emerging metaverse space, where the possibilities for interaction and engagement are infinitely expanded.

Peppers and Rogers' (1997) vision of one-to-one marketing was revolutionary, heralding an era of personalization in the relationship between brands and consumers. Today, that vision has not only materialized, but has been amplified by the advanced capabilities of AIE. These technologies have turned prediction into reality, enabling marketing strategies that combine scale with deep personalization. Using algorithms and predictive analytics, AIEs are able to understand and anticipate consumer needs and preferences.

An example of this transformation is Amazon's approach to the use of personalized recommendations. The e-commerce company uses algorithms to analyze users' purchase history, searches and browsing behavior, creating personalized product recommendations that increase relevance for the consumer and, consequently, sales conversion (Linden, Smith, and York, 2003).

In addition, platforms such as Netflix and Spotify have taken personalization to new heights, using EIA to curate content that individually resonates with each user's tastes and preferences. Netflix, for example, recommends films and series based on previous viewings, as well as customizing the thumbnails of titles to attract the attention of different users, a testament to the power of data-driven personalization (Gomez-Uribe and Hunt, 2016).

The ability of AIEs to dynamically adjust content and messages in real time, based on a complex matrix of user data, fulfills the promise of one-to-one marketing and sets a new standard for consumer engagement. This level of personalization improves the user experience and represents a significant competitive differentiator for the brands that adopt it. Integrating technologies such as voice recognition and augmented reality (AR) into marketing strategies enables even richer and more interactive experiences. For example, the use of AR by retail brands allows consumers to view products in their own space before purchase, offering a personalized and immersive shopping experience that increases customer confidence and satisfaction.

This evolution reflects a paradigm shift in marketing, where the ability to offer truly personalized and meaningful communications has become a tangible reality, thanks to the advancement of EIA. The future promises an era of hyper-personalization, where every interaction between brand and consumer will be unique, predicting a continuation of the visionary journey begun by Peppers and Rogers (1997). In addition, Fogg's (2003) research on Persuasive Computing suggests that technologies can be designed to change attitudes and behaviors. AIEs, by offering highly personalized brand experiences, satisfy consumer needs more efficiently, influencing purchasing decisions and strengthening brand loyalty.

The concept of digital fluidity, as explored by Van Dijk (2012), is particularly pertinent in this context. The notion that digital technology permeates all aspects of everyday life finds expression in the application of EIA in marketing strategies. As the boundaries between online and offline become

increasingly blurred, EIA facilitates a continuous and contextually rich interaction between brands and consumers. This interaction is not confined to traditional touchpoints; instead, it extends across a multitude of platforms and devices, reflecting the ubiquity of the digital experience.

In addition to digital fluidity, the Long Tail theory (Anderson, 2006) emphasizes that the importance of niche markets in a digital economy is amplified by the ability of AIEs to cater to highly specific interests at scale. This phenomenon challenges the traditional focus on mass markets, and also suggests a reconfiguration of the principles of market segmentation, where personalization reaches a degree of granularity that turns each consumer into a market segment of their own.

The evolution of EIA in influencer marketing signals a fundamental transformation in the relationship between brands and consumers. The transition from marketing strategies based on general assumptions about consumer behavior to approaches founded on an intimate and dynamic understanding of individual preferences reflects a paradigmatic shift. This shift raises consumer expectations of personalization and sets a new standard for value creation in the digital ecosystem. As the unlimited potential of AIE is explored, it becomes necessary for technological advancement to be balanced with ethical considerations, ensuring that the era of personalization at scale is marked by innovations that enrich the human experience in a responsible and sustainable way.

## VII. Ethical Implications Of Eia Autonomy: Navigating Between Innovation And Responsibility

The emergence of AIEs in the field of influencer marketing brings with it a series of ethical challenges that span data privacy, consumer consent and, more broadly, the autonomy of technology. As these entities begin to play increasingly significant roles in mediating relationships between brands and consumers, it becomes relevant to address the ethical implications of their autonomous actions.

Bostrom (2014) and Floridi (2016) address the ethical implications of AI development and implementation, stressing the imperative of aligning machine operations with ethical principles that reflect human values. This concern is particularly pertinent in marketing, where personalization and segmentation rely heavily on sensitive consumer data.

In addition to the concerns raised by Bostrom and Floridi, the theory of distributed ethical responsibility offers an additional lens for examining the implementation of EIA in marketing. This theory, discussed by Johnson (2006), suggests that in complex technological systems, ethical responsibility should not fall exclusively on the creators of the technologies, but be distributed among all the agents involved, including developers, users and regulators. This implies a need for collaborative frameworks that guarantee the ethical governance of EIA, especially with regard to the collection, use and consent of consumer data.

The integration of ethical principles in the development and implementation of EIA in marketing also highlights the importance of approaches such as ethical design, proposed by Friedman and Kahn (2003), which emphasizes the incorporation of ethical values early in the design process of technologies. This includes considerations of how EIA can influence user autonomy, informed consent and data privacy, ensuring that marketing strategies respect consumer rights and strengthen trust in the brand-consumer relationship.

Furthermore, the issue of consumer consent in interactions mediated by AIEs is further complicated by the ability of these entities to subtly influence consumer decisions. Kahneman (2011) and Thaler and Sunstein (2008) discuss the importance of understanding how preferences are formed and manipulated, especially in digital environments, where AIEs can design hyper-personalized experiences that shape consumer behavior in previously unfeasible ways. Thus, Fjeld et al. (2020) propose a set of ethical principles for AI that includes responsibility, explainability and fairness, which could serve as a foundation for the responsible development of EIA in influencer marketing.

Transparency, in particular, is essential to maintaining consumer trust in an increasingly automated environment. Consumers have the right to know when they are interacting with EIA and how their data is being used to influence their purchasing decisions. The "blackbox" concept in AI, where machine decision-making processes are not easily understood by humans, highlights the need to develop AIEs that are effective, recognizable and explainable. Burrell's (2016) work on opacity in algorithmic systems reinforces the importance of explainability as a key component for trust and accountability in AI technologies.

Furthermore, the issue of fairness arises when considering the potential of EIA to perpetuate or even widen existing inequalities. The use of historical data to train algorithms can lead to biased results, reinforcing stereotypes and discriminating against certain groups. Barocas and Selbst's (2016) work on algorithmic discrimination

offers crucial insight into how data collection and use practices can lead to injustice, underlining the need for ethical approaches that prioritize equity and inclusion.

The growing autonomy of AIEs also raises questions about responsibility in cases of failure or damage. As the lines between decisions made by humans and machines become increasingly blurred, assigning responsibility becomes a challenge. Floridi et al.'s (2018) research into the ethics of AI suggests that a new framework of responsibility is needed, one that can accommodate the complexity of interactions between humans and autonomous systems.

Table 3 serves as a comprehensive map distilling the main elements, relevant theories, ethical and practical challenges, and suggestions for responsible practice within the domain of AIEs in influencer marketing. By exploring crucial categories such as EIA autonomy, data privacy, consent, transparency and fairness, accountability, as well as ethics and governance, it outlines an essential compendium for a cogent discussion on their ethical applications and regulation.

**Table 3 - Ethical Challenges and Strategies for Responsibility in AI Technologies Applied to Marketing.**

Category	Key Elements	Relevant Authors & Theories	Ethical and practical challenges	Suggestions for Responsible Practice
EIA autonomy	Decisions without human intervention	Bostrom (2014), Floridi (2016)	Ethical responsibility in marketing scenarios	Developing EIA in line with human values and ethical principles
Data privacy	Collection and use of personal data	GDPR, Zuboff (2019), Van Dijck (2013)	Protection against the erosion of privacy; transparent and fair data management	Implement strict consent standards; constant monitoring of data management practices
Consent	Informed and transparent consent	Kahneman (2011), Thaler & Sunstein (2008)	Prevention of unwanted manipulation; guarantee of informed consent	Adopt approaches that ensure full transparency in the consent process
Transparency and Justice	Understanding EIA decision-making processes	Burrell (2016), Barocas & Selbst (2016)	Developing explainable EIAs; avoiding biased results and discrimination	Prioritize the development of explainable systems; implement practices that promote equity
Responsibility	Assigning responsibility in the event of faults or damage	Floridi et al. (2018)	Defining responsibilities in interactions between humans and autonomous systems	Developing a new framework of responsibility that accommodates the complexity of interactions between humans and EIAs
Ethics and Governance	Ethical principles for AI; regulations and governance practices	Fjeld et al. (2020)	Ensuring that innovation is ethical, responsible and aligned with human values	Fostering collaboration between academics, industry, politicians and civil society to develop ethical standards and regulations

This compendium synthesizes the contributions of theorists such as Bostrom (2014) and Floridi (2016), who discuss the autonomy of AIEs and the underlying ethical challenges, as well as incorporating elements on data privacy in light of the GDPR and the orizations by Zuboff (2019) and Van Dijck (2013). Furthermore, in addressing informed and transparent consent, it evokes the behavioral theories of Kahneman (2011) and Thaler & Sunstein (2008), while highlighting the need for transparency and fairness through their analyses of Burrell (2016) and Barocas & Selbst (2016).

The complexity of assigning responsibility in interactions between humans and autonomous systems is meticulously examined with reference to Floridi et al. (2018), culminating in the discussion on ethics and governance, supported by the contributions of Fjeld et al. (2020). Therefore, as we explore the vast potential of EIA in influencer marketing, it is important to do so with an awareness of the ethical implications involved. Building a system that respects privacy, guarantees informed consent, promotes transparency and explainability, and prioritizes justice and fairness is not only an ethical obligation, but a practical necessity to maintain trust and legitimacy in the use of EIA in influence marketing (Vinogradov, 2022; Jian et al., 2022).

The ability of these technologies to operate independently, while offering potential benefits, calls for deep reflection on how to ensure that they align with fundamental human values and ethical principles. This ethical challenge highlights the need for a reflexive approach to the implementation of EIA, and also foreshadows the critical importance of robust regulatory and governance frameworks that can guide and shape the use of these technologies in influence marketing (Vinogradov, 2022).

As we move to the next stage of this exploration, attention turns to how these frameworks can be established and adapted to promote responsible integration of EIA, ensuring that technological innovation

thrives within a framework that protects and respects the rights and dignity of all involved. This way forward requires interdisciplinary collaboration, joining forces to create a balance between technological advancement and ethical responsibility, paving the way for influencer marketing practices that are not only effective, but also ethical and fair.

### **VIII. Regulation And Governance In The Use Of Eia In Influencer Marketing**

The rise of AIEs in influencer marketing represents an urgent need for proper regulation and governance to ensure that technological innovation is balanced with consumer protection and rights. The complexity of AIEs, combined with their potential impact on privacy, authenticity of communication and autonomous decision-making, requires a careful and considered approach to regulation and governance.

The existing literature on the regulation of emerging technologies provides a solid basis for exploring these issues. For example, Lessig (1999) argues that regulation can be achieved through four modalities: laws, social norms, the market and technological architecture. This framework can be applied to the context of EIAs, suggesting that a specific approach is needed to effectively regulate these technologies in influence marketing.

Legal regulation plays a role in outlining the operational parameters for AIEs, ensuring the protection of consumer rights while promoting fairness and equity in the digital environment. In addition to the European Union's General Data Protection Regulation (GDPR), a landmark in data privacy legislation, there are other regulatory initiatives around the world that reflect the need for a comprehensive and adaptable regulatory framework. For example, China's Personal Information Protection Law (PIPL) and the California Consumer Privacy Act (CCPA) in the United States are efforts to address similar challenges in different jurisdictions, each adapted to their specific needs and contexts.

These regulations have managerial implications, requiring companies to re-evaluate their data collection, storage and processing practices to ensure compliance. The need for transparency and explicit consent from users, along with the right to access and delete their data, imposes new responsibilities and operational challenges on organizations.

The dynamic and autonomous nature of EIA, however, poses an additional challenge to regulation, highlighting the need for laws that set limits and are capable of adapting to the rapid pace of technological innovation. This implies a regulatory model that can evolve, incorporating feedback mechanisms and continuous revision, to ensure that guidelines remain relevant and effective in the face of the advance of EIA. Therefore, collaboration between legislators, academics, industry and civil society is essential to develop regulations that balance innovation and consumer protection in an increasingly complex digital ecosystem.

In addition to laws, social norms and ethics play a crucial role in regulating EIA. Public acceptance of EIA in influencer marketing depends on the development of clear ethical standards that guide the creation and use of these technologies. A more profound example of this issue can be seen in the use of EIA to create artificially generated content, such as deepfakes, which raises concerns about the veracity and trust of information disseminated online. This technology can be used to create highly personalized and persuasive marketing messages, but it can also be employed unethically to mislead consumers by manipulating their perceptions of products, services or brands.

Another area that requires an ethical deepening is the use of personalized recommendation algorithms. While these algorithms can improve the user experience by providing relevant and personalized content, they can also perpetuate filter bubbles and polarization, limiting consumer exposure to a diverse range of products and ideas. This calls into question the responsibility of companies to promote a diversity of choices and avoid indirect manipulation of consumer decisions.

The market is also a powerful force in regulating EIAs, with consumers and companies playing active roles. Consumers can exert pressure on companies to adopt responsible practices, while companies can differentiate themselves through commitments to ethics and transparency in the use of EIA. Self-regulatory initiatives and industry standards can complement legal regulation, offering flexibility and adaptability (Haufler, 2001). On the company side, some stand out for integrating AI ethics into their core business. For example, Salesforce introduced the "Office of Ethical and Humane Use of Technology", which aims to guide the company in creating technologies that respect fundamental ethical principles. This initiative differentiates Salesforce in a competitive market, setting a benchmark for other companies in the technology sector.

In addition, coalitions and partnerships between companies have emerged to establish shared ethical standards. The "Partnership on AI", which includes companies such as Google, Amazon, Facebook, IBM and Microsoft, is an example of a collaborative effort to establish best practices in the development and use of AI, including issues of fairness and transparency. In this sense, Table 4 indicates the critical elements of this ecosystem, ranging from legal regulation to consumer and business education, outlining its relevance to EIA-supported influencer marketing and grounded in solid theoretical references.

**Table 4 - Fundamentals and Strategies for Ethical Governance in InfluenceMarketing with EIA.**

Element	Description	Relevance to Influence Marketing with EIA	Theoretical references
<b>Legal regulation</b>	Establishing law to limit the operation of EIAs, protecting consumer rights and guaranteeing justice.	Fundamental to defining the scope of EIA's activities and protecting personal data.	Voigt & Von dem Bussche (2017) - GDPR
<b>Social norms and ethics</b>	Development of ethical consensus to guide the creation and use of EIAs, such as transparency and authenticity in interactions.	Crucial for the public acceptance of EIAs and to guarantee authentic communications.	Bostrom & Yudkowsky (2014) - Ethics in AI
<b>Market</b>	Influence of consumers and companies on the adoption of responsible practices through market pressure and differentiation.	It allows for self-regulation and the establishment of industry standards, promoting ethics and transparency.	Haufler (2001) - Self-regulation and Industry Standards
<b>Technological Architecture</b>	EIA design and implementation with ethical and privacy considerations.	Intrinsic regulation that prevents abuse and promotes responsible use of EIAs.	Floridi (2016) - Ethical Design in Technology
<b>Interstakeholder collaboration</b>	Cooperation between developers, marketers, consumers, regulators and academics to create effective policies.	Essential for the development of effective governance that promotes responsible innovation.	Schneier (2015) - Co-creating Ethical and Regulatory Standards

This context requires an understanding of how each element influences and is influenced by influencer marketing practices. Legal regulation, for example, sets the operational boundaries of EIA, ensuring that consumer rights are protected and that justice prevails. Social and ethical norms, on the other hand, guide the acceptance and responsible practice of EIAs, emphasizing the importance of transparency and authenticity. The influence of the market, manifested through consumer pressure and companies' differentiation strategies, promotes self-regulation and the adoption of ethical industry standards. The technological architecture of AIE, with its implications for ethical design and privacy, points to an intrinsic regulation that favors the responsible use of these technologies.

Collaboration between stakeholders from different spheres is essential to develop effective governance that supports responsible innovation. Consumer and business education plays a critical role in promoting informed choices and responsible technological development. Finally, the internationalization of governance seeks to avoid regulatory fragmentation, ensuring consistent consumer protection on a global scale (Schneier, 2015). These elements, as set out in the table, underpin current practices in influencer marketing, as well as guiding the way for future innovations and ethical implementations of EIA in this field.

Thus, brands and influencers, now more than ever, find themselves at a crossroads where technological innovation must be balanced with ethical, regulatory and privacy considerations. The search for authenticity and genuine engagement becomes both a goal and a challenge, outlining a future where strategic collaboration, continuous adaptation and a commitment to responsible practices will be key to navigating the ever-evolving landscape imposed by EIA.

### IX. Challenges And Opportunities For Brands And Influencers In The Age Of Eia

The introduction of AIEs into influencer marketing marks a turning point for brands and influencers, presenting both challenges and opportunities. For brands, one of the main opportunities offered by AIE lies in the ability to personalize communication and product offerings at scale. The promise of AIE for brands materializes in the possibility of deeply personalizing communication and product offerings on a large scale, going beyond the traditional limits of segmented marketing (Saini, 2022).

However, implementing EIA requires brands to take a strategic and adaptive approach, ranging from integrating complex data systems to developing in-house skills to interpret and act on AI-driven insights. Companies such as Spotify, which uses AI to create personalized playlists that reflect the unique tastes of each listener, exemplify the potential to build deeper and more meaningful relationships with consumers, increasing loyalty and the perceived value of brands (Chen et al., 2022).

In addition, EIA enables more sophisticated and predictive data analysis, facilitating a deeper understanding of consumer behaviors and preferences. This, in turn, allows brands to create highly personalized experiences, increasing marketing effectiveness and boosting customer loyalty (Byun & Ahn, 2023).

However, implementing EIA also presents significant challenges for brands, particularly in terms of privacy and ethical use of data. In addition to the critical issues of information security and consumer consent, brands face the challenge of ensuring that predictive analytics and automated recommendations are accurate and relevant, avoiding the risk of alienating customers with misdirected or invasive suggestions (Chen et al., 2022). This challenge is amplified by the need to maintain a cohesive and integrated user experience, where AI-based solutions must be seamlessly incorporated into existing marketing practices without creating friction or disconnection for the consumer.

Additionally, implementing EIA requires a delicate balance between personalization and the perception of surveillance, where brands must carefully manage consumer expectations about how their data is used and for what. Transparency in communication and strengthening user control over their data are key to building trust. The literature, including the work of Martin (2019), highlights the growing demand for greater consumer control over their personal information, putting pressure on brands to adopt more ethical and responsible practices in the use of data.

For influencers, EIAs represent both an opportunity to improve their effectiveness and a challenge to their relevance. On the one hand, EIA can be used to analyze audience engagement and preferences in more detail, optimizing content to achieve better results. Furthermore, the ability of AIEs to generate autonomous and personalized content could threaten the unique position of human influencers, which is based on authenticity and personal connection with their followers. Djafarova and Rushworth (2017) explore the importance of authenticity in the public's perception of influencers, suggesting that maintaining this quality is crucial to influencer effectiveness.

Faced with these challenges and opportunities, both brands and influencers need to develop strategies for adaptation and coexistence. For brands, this may involve adopting stricter data governance practices, developing clear privacy policies and seeking a balance between personalization and respect for consumer privacy. For influencers, adaptation can mean a greater emphasis on creating content that highlights their humanity and authenticity, as well as exploring collaborations with EIAs that extend their reach and relevance (Santiago & Castelo, 2020).

Table 5 shows the strategic dynamics related to the digital ecosystem considering influencer marketing, highlighting the evolution of immersive technologies such as Augmented Reality (AR) and Virtual Reality (VR), given that these technological devices further broaden the spectrum of personalized and immersive experiences available to consumers. In the context of brands, Kumar and Reinartz (2016) highlight the opportunity for personalization at scale and the ability to deeply understand consumer behaviour through predictive analysis. However, these advances come with significant challenges regarding privacy and ethics in data use, requiring brands to carefully navigate regulatory complexities. Martin (2019) offers a critical perspective on the need for data governance and clear privacy policies, highlighting the importance of balancing personalization and privacy, grounded in Perceived Value Theory and ethics in the age of big data and AI.

**Table 5 - Dynamics and Adaptation Strategies in the Digital Marketing Ecosystem.**

Actors	Opportunities	Challenges	Strategies for Adaptation	Additional Theoretical Considerations	Authors and References
<b>Brands</b>	Personalization at scale ; Predictive analysis to understand	Privacy and ethics in the use of data; Navigating regulatory complexities.	Data governance; Clear privacy policies; Balance between	Perceived Value Theory; Ethics in the age of big data and AI.	Kumar & Reinartz (2016); Martin (2019)

For influencers, content optimization based on detailed analysis of engagement and preferences presents a unique opportunity to improve relevance and communicative effectiveness. However, as Djafarova and Rushworth (2017) and Schouten et al. (2020) point out, there is a latent threat to authenticity, as EIA's ability to generate content could dilute the humanity essential to the influencer-consumer connection. Adaptation strategies include creating content that genuinely emphasizes humanity and collaborating effectively with AIEs, anchored in the Importance of Authenticity and Value Co-creation. EIA themselves, with their autonomous content generation and data analysis capabilities, face ethical questions and acceptance challenges. Martin & Murphy (2017) and Kaplan & Haenlein (2020) stress the need for collaboration and integration with humans, emphasizing transparency and accountability in the use of EIA, reflecting fundamental principles of AI ethics and technological innovation.

As for immersive technologies, Kaplan & Haenlein (2020) explore their revolutionary potential in marketing, highlighting the creation of immersive and personalized experiences. Challenges include the need for continuous innovation and overcoming barriers in technological implementation, suggesting the exploration of new formats and integration with EIA to enrich the consumer experience.

Data governance emerges as a crucial component in improving consumer trust through responsible practices. Martin and Murphy (2017) discuss the complexity of managing large volumes of data and complying with regulations, pointing to the adoption of ethical frameworks and a firm commitment to data protection, reflecting ethical marketing in the digital age.

This panorama demonstrates that, while the opportunities for personalization, predictive analytics, and the creation of immersive experiences are vast, entities involved in influencer marketing must face and overcome challenges related to privacy, ethics, and technological integration. The key to successful adaptation lies in implementing strategies that promote data governance, transparency, and collaboration between humans and EIA, all anchored in a deep understanding of the theoretical and ethical considerations that shape the interaction between brands, influencers, technology and consumers.

The successful integration of AIEs into influencer marketing is not just about overcoming operational and ethical challenges; it also opens the door to an era of responsible and inclusive innovation. As this analysis draws to a close, we reflect on the wider implications of these technologies not only for influencer marketing, but also for society as a whole, highlighting the importance of moving forward with caution, awareness and a commitment to fundamental ethical values.

## X. Conclusion

This study aimed to uncover the transformative role of EIA in influencer marketing practices, analyzing their impact on the dynamics between brands, influencers and consumers, as well as on the evolution of personalization and engagement strategies in the digital environment. Through an analysis based on theories of power and influence adapted to the digital universe, it was possible to objectively answer the research question and achieve the objectives outlined.

This study highlighted how AIEs are reconfiguring traditional influencer marketing methods, introducing new personalization capabilities at scale and fostering more authentic and effective interactions between brands and consumers.

At the same time, emerging ethical and regulatory challenges are identified and discussed. Thus, this paper attests to the growing influence of EIA in influencer marketing and contributes significantly to the existing literature by offering practical guidelines and ethical considerations for the responsible integration of these technologies into modern marketing strategies.

The results of this study advance knowledge in the field of influencer marketing, filling a critical gap in the literature by detailing the transformative impact of AIEs in mediating digital influence. Specifically, this work highlights the duality of AIEs as facilitators of personalization on a scale never seen before and, simultaneously, as entities that raise complex ethical questions related to their autonomy and the management of personal data. By exploring these dimensions, the research broadens the understanding of how AIEs can be integrated to optimize influencer marketing strategies, as well as inciting critical reflection on the ethical implications of this integration.

In this way, the study also contributes to theoretical deepening by offering new perspectives on the application of influence theories in the digital context enriched by AIEs and provides a practical basis for the responsible implementation of these technologies. The study also broadens the understanding of power and influence in digital marketing by incorporating AIEs as a new category of influencer. In addition, the critical analysis of the personalization provided by AIEs contributes to the influencer marketing literature, following the line of Schouten, Janssen and Verspaget (2020), who emphasize the importance of personalization in consumer engagement.

Managerially, the study offers strategic guidelines for brands and influencers in adapting to the changes brought about by EIA, suggesting the co-creation of content and continuous innovation as means of maintaining relevance and authenticity. It also highlights the importance of considering the ethical implications of using EIA.

However, this study has limitations, mainly related to the rapid technological evolution and the emerging field of application of EIA in influencer marketing. It is therefore suggested that future research further explores the impact of EIA on consumer behavior and the effectiveness of marketing campaigns, as well as the long-term implications of its integration into marketing practices.

A promising avenue for future research includes exploring influencer marketing in the metaverse, where AIEs can play an even more significant role. Research into how brands and influencers can effectively operate in this expanded virtual environment. Given the innovative nature and the rapid evolution of the metaverse, this field represents an opportunity for academic exploration, opening up new frontiers for understanding the intersection between technology, marketing and society.

This study establishes a starting point for understanding EIA in influencer marketing, offering a solid foundation for future research. In doing so, this article contributes to the academic literature and provides



practical guidelines for practitioners, outlining a future in which technology and humanity converge in influencer marketing in ethical and innovative ways.

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