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AI Meets Influencers: The Rise of Virtual Influencers in Digital Marketing

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Abstract

The rise of social media has transformed digital marketing, making influencer marketing a dominant strategy for brands seeking to engage consumers. As artificial intelligence (AI) advances, a new phenomenon is emerging—virtual influencers. These AI-generated personas are designed to interact with audiences much like human influencers, offering brands an innovative, controlled, and scalable marketing tool. However, their integration into digital marketing raises critical questions about trust, authenticity, and ethical transparency.

This dissertation explores the rise of virtual influencers in digital marketing, assessing both their potential and challenges. Through a mixed-methods approach, the study combines a consumer survey (n=147) and an AI-driven case study with the development of Celeste, a virtual influencer designed to engage fashion consumers. The research investigates consumer perceptions of human and AI influencers, identifies key factors influencing trust and engagement, and examines the ethical concerns surrounding AI-driven marketing. Additionally, a subject matter expert analysis provides industry insights on the viability of virtual influencers in marketing strategies.

The findings reveal that while virtual influencers offer cost-efficiency, innovation, and brand control, they face significant barriers in consumer trust and perceived authenticity. Most respondents remain skeptical of AI influencers, with concerns about manipulation, transparency, and emotional detachment. Experts, however, recognize the potential of AI influencers as a complementary marketing tool, particularly in fashion and lifestyle industries.

As AI continues to reshape digital marketing, this study highlights the importance of ethical AI adoption, transparency, and consumer education to foster trust in virtual influencers. The research contributes to the growing discourse on AI in marketing and provides practical insights for brands considering AI-generated personalities in their influencer strategies.

Keywords: Virtual Influencers, AI in Marketing, Influencer Marketing, Digital Marketing, Consumer Trust, Ethical AI Adoption

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1. Introduction

Over the past decade, social media has evolved from a simple networking platform into a marketing powerhouse that has substantially affected how brands interact with customers. Influencer marketing has been a driving force in this evolution, allowing companies to tap into the authenticity and relatability of popular online personalities to sway consumer decisions. Now that influencer marketing has become a staple strategy, brands are constantly seeking creative new ways to stand out, keep audiences engaged, and build lasting trust.

In recent years, the intersection of influencer marketing and technological innovation has given rise to an intriguing new trend: the virtual influencer. These are digital personas created with artificial intelligence (AI), designed to look and act like real people on social media. Because these characters are entirely fictional and controlled by their creators, brands can adjust precisely every aspect of them, from their appearance and personality to the content they post and the voice they use. This level of control means marketing campaigns can stay consistently on-brand and even be scaled up with ease. Virtual influencers like Lil Miquela, Imma, and Lu do Magalu already have millions of followers and collaborate with major brands, showing that these AI-driven characters can indeed captivate large audiences.

But this promising innovation does not come without challenges. Virtual influencers introduce new complexities around consumer trust, authenticity, transparency, and ethics—factors that are deeply valued in traditional influencer marketing. People follow human influencers for their genuine personalities and real-life stories, so it is not surprising that some consumers are skeptical about whether a digital character can truly recreate that kind of authentic connection and emotional bond.

This dissertation focuses on virtual influencers in the fashion industry to explore these issues. It examines how consumers perceive these AI-driven personas, how much trust they are willing to place in them, and what ethical concerns might emerge from this fresh form of marketing. To investigate these questions, the research adopts a mixed-method approach that includes a consumer survey, a creative case study involving the design of a virtual influencer named Celeste, and interviews with industry experts. By combining these methods, the study

offers a well-rounded view of both the potential benefits and the risks of integrating virtual influencers into digital marketing campaigns. Ultimately, the aim is to help brands understand how to embrace this innovative strategy responsibly by finding the right balance between cutting-edge technology and the human touch needed to maintain authentic connections with audiences.

Although prior research has extensively explored traditional influencer marketing strategies, limited attention has been given to consumer perceptions and ethical implications of AI-driven influencers, particularly within the fashion industry. Given the increasing presence of virtual influencers, there is a need to understand consumer attitudes and business implications surrounding these digital personas. This dissertation aims to explore three primary questions:

1. How does influencer marketing impact consumer behavior in fashion?
2. What potentials and challenges arise from integrating AI influencers into marketing strategies?
3. What ethical concerns do AI influencers raise among consumers and industry professionals?

The study begins by reviewing relevant literature on influencer marketing and virtual influencers, setting the theoretical groundwork (Chapter 2). It then describes the mixed-method approach used for this study, combining surveys, AI influencer development, and expert analysis (Chapter 3). Subsequently, the findings from consumer data (Chapter 4) and the creation and evaluation of Celeste, the AI influencer developed as a case study (Chapters 5 & 6), are presented. Finally, the dissertation concludes with a discussion of findings, limitations, and future directions for research and industry practice (Chapters 7 & 8).

1.1 Definitions

In this dissertation, the terms "AI Influencers" and "Virtual Influencers" are used interchangeably to refer to digitally generated personas controlled by artificial intelligence technology. Other terms and concepts related to influencers are discussed in detail in Chapter 2 (Theoretical Background).

2. Theoretical Background

This chapter provides a comprehensive theoretical foundation for understanding influencer marketing, virtual influencers, and their impact on consumer behavior. It begins by exploring the role of social media in modern marketing, and how influencers engage with audiences and shape consumer perceptions. Then, the discussion turns to the growing presence of AI-driven marketing and how artificial intelligence enhances content creation, personalization, and digital strategies.

As AI continues integrating into marketing strategies, critical ethical questions arise particularly around transparency, data privacy, algorithmic bias, and the authenticity of AI-generated content. To address these concerns, this chapter also explores strategies for the ethical adoption of AI, highlighting best practices that promote fairness and consumer protection.

Understanding these dynamics is essential to evaluate the evolving role of AI in digital marketing and how it affects the future of e-commerce.

2.1 Social Media: Importance in Modern Marketing

In recent years, the growth of social media has brought remarkable changes to the marketing landscape and has transformed the way brands interact with consumers. Traditional marketing has now become a dynamic, interactive, and well-targeted process. Unlike conventional advertising, which relies on one-way communication, social media enables direct engagement between brands and consumers, fostering a sense of community and brand loyalty (Jibril et al., 2019).

The rise of social media platforms like Instagram, TikTok, Facebook, and X (formerly known as Twitter) has provided marketers with new tools to: increase brand awareness by creating viral content and collaborating with influencers, target audiences more effectively by using user data analytics and enhance customer engagement through interactive content, direct messaging, and real-time feedback. The ability to personalize content and analyze consumer data has allowed brands to optimize their strategies, increasing conversion rates and return on investment.

A study by Park et al. (2024) found that approximately 60% of the global population actively uses social media, so influencers wield economic and social significance making them an essential channel for marketing campaigns.

So, what is an Influencer?

An influencer is someone who has the ability to affect the behavior or choices of others, such as their social media followers. They gain influence through a combination of authenticity, expertise, relatability, and engagement (Park et al., 2024). Typically, influencers are paid by companies to promote and discuss products or services on social media, encouraging their audience to use the same things as they do and proceed to purchases.

Influencers are categorized mostly by the industry or niche market they refer to, or by the number of followers they have:

Nano-influencers	1K-10K followers
Micro-influencers	10K-100K followers
Macro-influencers	100K-1M followers
Mega-influencers	>1M followers

Table 2 1 Influencer Categories

Influencers operate based on parasocial relationships—one-sided emotional bonds formed by audiences who perceive influencers as relatable or aspirational figures (Rungruangjit et al., 2024). These relationships increase trust and engagement, making influencer marketing an effective tool for brand promotions.

2.2 Social Media's Influence on Consumer Behavior

The influence of social media extends beyond advertising—it shapes consumer perceptions, emotions, and decision-making processes. Several psychological and social factors contribute to this influence:

1. Peer Influence

- Consumers tend to trust recommendations from peers and influencers more than traditional advertisements and rely on them before making a purchase.
- The bandwagon effect ¹ makes people more likely to purchase a product when they see it being favored by others.

2. Parasocial Relationships

- Consumers form emotional connections with influencers, making them more likely to trust their product recommendations.
- Through this perceived authenticity, brands can promote products more effectively.

3. Personalization and Targeting

- Social media use AI-driven algorithms to show personalized ads based on user preferences and content can be precisely targeted at relevant audiences.

4. FOMO (Fear of Missing Out)² and Impulse Buying

- Limited-time offers, exclusive influencer collaborations, and viral trends trigger FOMO, pushing consumers to make quick purchasing decisions.

2.3 The Shift towards AI-Driven Marketing

The rapid advancement of artificial intelligence (AI) and machine learning has equipped social media marketing with many innovative tools. AI has introduced automation, data-driven strategies, and machine-generated content into the landscape. These innovations allow businesses to create hyper-personalized content, optimize marketing campaigns in real-time, and even develop AI-driven influencers who interact with audiences much like their human counterparts.

¹ As defined by «www.investopedia.com» «The bandwagon effect is a psychological phenomenon in which people do something primarily because other people are doing it, regardless of their own beliefs, which they may ignore or override. This tendency of people to align their beliefs and behaviors with those of a group is also called a herd mentality. »

² (Gupta et al., 2021) «In 2013 British psychologists elaborated and defined it as “pervasive apprehension that others might be having rewarding experiences from which one is absent”, FOMO is characterized by the desire to stay continually connected with what others are doing. »

AI-Generated Content and Automation

AI-generated content refers to text, images, videos, or even full campaigns created using machine learning algorithms. Advanced AI tools can now generate marketing materials that are almost indistinguishable from human-created content.

Some key AI-driven automation trends in marketing include:

- AI-Powered Copywriting and Social Media Posts, AI- tools assisting in writing ads, captions, and automated responses.
- Personalized Content Recommendations, platforms like Instagram, TikTok, and YouTube leverage AI algorithms to deliver customized content based on user behavior.
- Chatbots & AI Customer Service, AI-driven chatbots are now used by enterprises to interact with customers 24/7.

Aspect	Traditional	AI-Enhanced
Personalization	Generic recommendations	Hyper-personalized suggestions
Efficiency	Manual processes	Automated and real-time solutions
Engagement	Static emails, slow responses	Dynamic, real-time multi-channel
Data Use	Basic segmentation	Advanced behavior analysis
Response Time	Hours/days	Instant via AI chatbots
Conversion	Generic approaches	Optimized pricing and offers
Scalability	Limited by manual efforts	Seamless with automation

Table 2 2 AI Automations adopted by << Mizambekov, 2024>>

The Debut of AI-Generated Influencers

The introduction of virtual influencers (VIs) represents one of the most significant AI-driven shifts in social media marketing. Virtual influencers are computer-generated digital personas designed to mimic human influencers and engage with audiences through curated social media content. A study by Joel-Edgar et al. (2024) found that AI influencers and human influencers can achieve similar engagement rates if their content is well-targeted.

Examples of successful AI influencers:

- Lil Miquela, one of the most well-known, with over 3 million followers on TikTok, collaborated with Prada, Samsung, and Calvin Klein.
- Imma, a Japanese AI model working with brands like IKEA and Lenovo.
- Lu do Magalu, a Brazilian AI influencer with over 7 million followers on TikTok, created to promote retail products.



Figure 2 1 Successful Influencers

Key characteristics of AI influencers:

- Full brand control: Companies can design and manage every aspect of an AI influencer's persona, avoiding scandals and unpredictable behavior.
- Cost efficiency: Unlike human influencers, virtual influencers do not require salaries or contracts when they are developed from a specific brand for commercial purposes.
- Scalability: AI influencers can be customized for different markets and appear in multiple campaigns simultaneously.

However, studies indicate that consumer engagement with AI influencers is growing, but many users still prefer human influencers due to authenticity and credibility concerns, and a brand's trust can be damaged when negative issues related to AI-powered promotion occur. (Joel-Edgar et al., 2024)

2.4 Ethical Consideration in the Use of AI

The integration of AI and virtual influencers into marketing strategies offers innovative opportunities but also presents ethical dilemmas. From data privacy concerns to issues of authenticity and transparency, businesses should be very attentive to how they navigate through

these complexities to maintain consumer trust and preserve ethical standards. Some primary ethical concerns are:

1. Data Privacy and Security

AI systems rely heavily on consumer data, including browsing history, purchase behavior, and even sensitive personal information. While this data enhances personalization, it raises serious concerns about how securely data is stored and whether consumers are fully aware of how their data is being used (Mizambekov, 2024)

2. Algorithm Bias³ and Fairness

AI algorithms are only as neutral as the data they are trained on. Biases that are inherent in the data can lead to discriminatory outcomes, such as unfair pricing models or preferential treatment of certain consumer groups. In e-commerce, for instance, dynamic pricing models powered by AI can unintentionally disadvantage certain demographics (Mizambekov, 2024).

3. Consumer Manipulation

AI is designed to optimize consumer engagement by using psychological triggers like limited-time offers, or personalized persuasive design. While these strategies are effective for boosting sales, they blur the line between influencing and manipulating consumer decisions (Park et al., 2024).

4. Transparency

Consumers often struggle to distinguish between AI-generated and human-generated content on social media. This raises ethical concerns about transparency in AI marketing, especially when consumers are unaware they are interacting with AI-driven content (Park et al., 2024) .

The following table summarizes the ethical concerns with related risks and suggested solutions.

³ As defined by the Florida State University Libraries«www.lib.fsu.edu», «Algorithmic bias describes systematic and repeatable errors in a computer system that create unfair outcomes, such as privileging one arbitrary group of users over others. Also, occurs when an algorithm produces results that are systemically prejudiced due to erroneous assumptions in the machine learning process. »

Ethical Concern	Potential Risks	Suggested Solutions
Data Privacy and Security	Unauthorized data collection, data breaches ⁴ , loss of consumer trust	Implement robust data protection measures, transparent data usage policies
Algorithmic Bias and Fairness	Discriminatory outcomes, unfair pricing, biased recommendations	Regular algorithm audits, diverse training datasets, bias mitigation protocols
Consumer Manipulation and Autonomy	Exploitation of psychological triggers, impulse buying, reduced consumer autonomy	Ethical design practices, clear labeling of persuasive techniques, consumer education
Transparency	Difficulty distinguishing AI from human content, misleading marketing practices	Mandatory disclosure of AI-generated content, regulatory guidelines for transparency

Table 2 3 Ethical Concerns, Potential Risks & Suggested Solutions

Ethical Challenges Related to Virtual Influencers (VIs)

Authenticity

One of the fundamental concerns related to virtual influencers is the question of authenticity. Human influencers build trust in their audiences through their personal experiences and true interactions. VIs are computer-generated personas that lack real-life experiences and backgrounds. Despite this, they often participate in marketing campaigns appearing human which can mislead audiences if their artificial nature is not disclosed.

Studies have shown that consumers expect transparency in marketing and in cases where the AI-generated content is not clearly stated, consumers' trust can be damaged severely. This is

⁴ As defined by the European Commission «A data breach occurs when the data for which your company/organization is responsible suffers a security incident resulting in a breach of confidentiality, availability or integrity. »

particularly important when virtual influencers promote products or causes, as people may assume these endorsements are based on personal experiences.

Motives Behind

Virtual influencers are often being used to promote social causes like environmental sustainability or human rights. Unlike human influencers who align their personal values with the causes they support, virtual influencers are controlled entirely by brands or marketing agencies. This raises questions about whether their advocacy is truly aligned with the values being promoted, or if it's simply a strategic move to appeal to ethically-conscious consumers. The study by You & Liu (2024) highlights that consumers question the altruistic motives of VIs since they are created and controlled by brands with commercial interests.

This perceived lack of genuine motivation can undermine the credibility of campaigns that rely on virtual influencers to promote social good. When audiences sense that the advocacy isn't authentic, it can lead to skepticism, not just towards the influencer, but also the brand behind them.

The Line Between Reality and Fiction

Another ethical concern is the way virtual influencers can blur the line between reality and fiction. The majority of VIs are designed to look and behave like real people, sharing "personal" stories and engaging with followers as if they were human. This can create confusion among audiences, especially younger users, who may develop emotional connections with these artificial personas.

The ability of virtual influencers to create parasocial relationships raises moral questions. These connections are common with human influencers and the fact that virtual influencers are entirely fictional and controlled by marketing teams adds a layer of complexity. Consumers may be engaging with content that feels personal and relatable without realizing it's been carefully crafted to drive engagement and sales.

AI-generated content allows brands to scale campaigns at unprecedented speed, but it also raises concerns about authenticity, creativity, and ethical transparency (You & Liu, 2024). To balance innovation with responsibility and maintain trust, marketers using AI content must be clear

about their artificial origin and ensure their campaigns are aligned with honest values and ethical marketing practices. The succeeding section puts forward some strategic frameworks that subserve the ethical adoption of artificial intelligence in marketing and virtual influencers.

2.5 Strategies for Ethical AI Adoption

Regulatory Frameworks and Corporate Responsibility

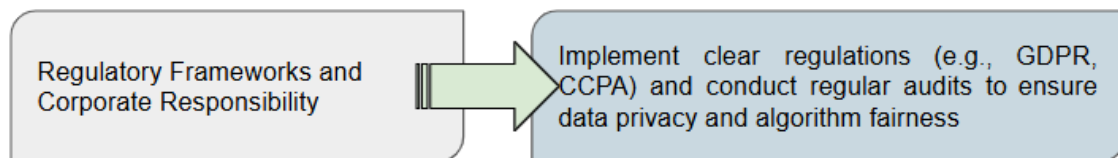


Figure 2 2 Strategies for Ethical AI Adoption: Regulatory Frameworks

At the core of ethical AI adoption is the implementation of clear regulatory guidelines. Policies like the General Data Protection Regulation (GDPR) in the European Union and the California Consumer Privacy Act (CCPA) set important benchmarks for data privacy and consumer consent. As AI technologies continue to evolve, businesses must proactively update their policies to address emerging concerns such as algorithmic bias, dynamic pricing manipulation, and AI-generated content transparency. Companies should also embrace corporate responsibility by conducting regular audits to ensure that their systems provide equitable outcomes for all users.

Transparency

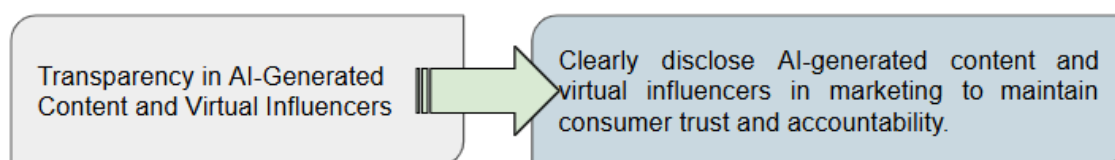


Figure 2 3 Strategies for Ethical AI Adoption: Transparency

Transparency is paramount, particularly in the use of virtual influencers (VIs). Brands should clearly disclose when content is AI-generated to avoid misleading consumers. This can be achieved through explicit labeling on social media platforms and in marketing campaigns, indicating that the influencer is virtual. Additionally, companies should outline how AI-driven content is created and managed, fostering a sense of accountability and trust among audiences. Transparency also extends to data collection practices, where consumers must be informed about how their data is used in AI-driven personalization strategies.

Fairness and Reduction of Algorithm Bias

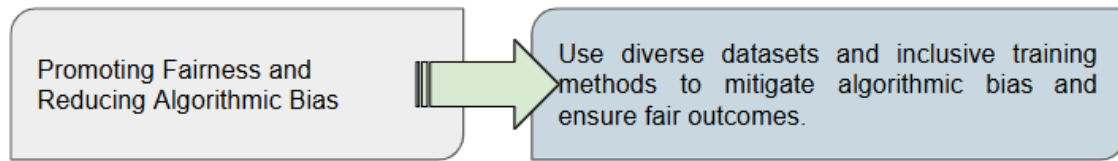


Figure 2 4 Strategies for Ethical AI Adoption: Fairness

AI algorithms are prone to biases inherited from training data that can lead to discriminatory outcomes in marketing practices. To address this, businesses should adopt diverse datasets and inclusive training methodologies to ensure that AI systems do not perpetuate stereotypes or unfair treatment of certain groups. Third-party audits of algorithms can help identify and correct biases, ensuring fairness in content recommendations. For virtual influencers, this means creating diverse, inclusive personas that reflect a wide range of cultural backgrounds and values.

Ethical Design

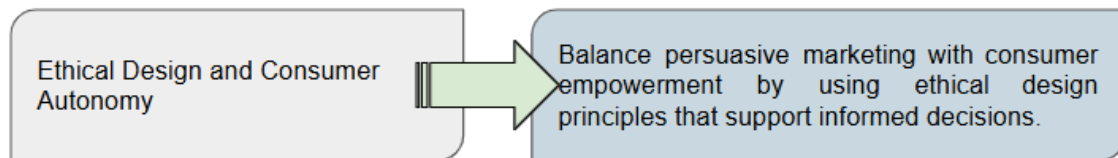


Figure 2 5 Strategies for Ethical AI Adoption: Ethical Design

AI-driven marketing strategies often leverage psychological triggers to drive sales. While these techniques might be effective, they can undermine consumer autonomy by encouraging impulsive behavior. Ethical AI adoption requires a balance between persuasive marketing and consumer empowerment. This can be achieved through legitimate principles that prioritize informed decision-making. For example, providing clear information about sponsorships and the intent behind personalized recommendations.

Consumer Education

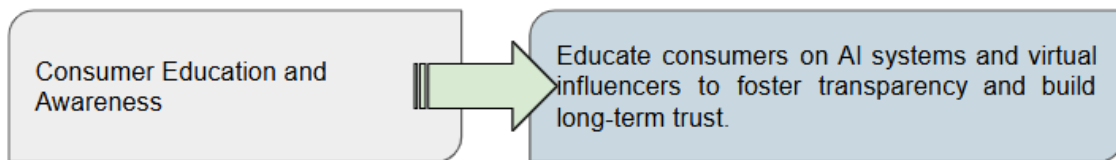


Figure 2 6 Strategies for Ethical AI Adoption: Consumer Education

Empowering consumers with knowledge about how AI systems operate is essential for fostering trust and engagement. Businesses should invest in consumer education initiatives, such as interactive guides, FAQs, and tutorials, explaining how AI influences their shopping experience. For virtual influencers, this means clarifying the role of AI in content creation and highlighting the brand's commitment to ethical marketing practices. By educating consumers about the presence of virtual influencers and their underlying AI systems, brands can build long-term relationships based on trust and transparency.

Global Efforts

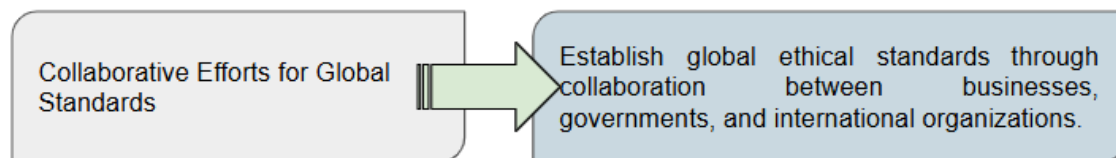


Figure 2 7 Strategies for Ethical AI Adoption: Global Efforts

Ethical AI adoption requires collaborative efforts between businesses, governments, and international organizations to establish universal ethical standards. Global organizations like the United Nations or the World Economic Forum can play a pivotal role in facilitating discussions and creating standardized frameworks across borders. A collaborative approach could ensure that AI technologies, including virtual influencers, are used responsibly across industries and regions.

3. Methodology and Implementation

This chapter explains the methods that were used to clarify the core research questions that this research deals with. The research questions explore consumer behavior concerning influencer marketing, the role of AI influencers, and the ethical challenges that come along. Specifically, the research seeks to answer the following:

1. What is the impact of influencer marketing on consumer behavior?
2. What are the potentials and challenges of AI influencers?
3. What are the ethical concerns associated with AI influencers?

3.1 Research Design

To investigate these questions, a mixed-methods approach was chosen to leverage the strengths of both quantitative and qualitative methodologies to provide a balanced framework for data collection and analysis.

- Quantitative Approach: Questionnaire Design

The quantitative aspect of this study is based on a questionnaire developed to collect data on consumer behavior, attitudes, and perceptions. This tool was chosen because it contributes statistical evidence from a broad sample and provides feedback for all research questions. The questionnaire includes both close-ended and Likert-scale questions to measure key variables such as shopping habits, opinions about influencer marketing- both traditional and AI, perceptions of trust in influencers, and ethical considerations related to marketing campaigns.

- Qualitative Approach: Development of Celeste

The qualitative dimension of the research is the creation of a virtual influencer named Celeste. She is a practical exploration of AI influencers, focusing on their design, capabilities, and potential to engage with audiences. This part of the research mainly pertains to the second and third research questions about the potential and ethical concerns of AI influencers.

This combination of methods certifies a well-rounded analysis of the topic. The questionnaire provides valuable insights into audience behavior and ethical concerns, while Celeste's

development demonstrates how theoretical ideas about AI influencers can be applied pragmatically.

3.2 Questionnaire Implementation & Analysis

Implementation of the Questionnaire

The questionnaire was distributed through email and social media to reach a diverse audience. There was no strict target applied but respondents aged 25-44 years old were prioritized as this demographic is more likely to engage with social media, shop online, and make independent purchasing decisions. Women were also preferred due to their greater interest in the fashion industry. Approximately 350 individuals were invited to participate, 147 of them completed the questionnaire, achieving a response rate of 43%.

All responses were anonymized to protect the confidentiality of participants and no personal or sensitive data was collected to ensure compliance with the ethical research standards.

Data Analysis Techniques

Responses were collected digitally with Google Forms and organized in Microsoft Excel for analysis. The analysis focused on identifying trends and patterns relevant to the study's core research questions with the following methods:

- Descriptive Statistics were used to summarize demographic data and key findings on consumer behavior.
- Cross-Tabulation was applied to explore relationships between variables.
- Frequency Distribution to highlight the most common responses across crucial areas.
- Likert-Scale Analysis to assess levels of trust and agreement regarding AI influencers and transparency in marketing campaigns.

Each analysis was conducted focused on the study's main objectives so that the findings address the impact of influencers' marketing, the role of AI influencers, and the associated ethical considerations.

3.3 Development of Celeste

The creation of Celeste works as a case study to examine the hands-on application of an AI influencer to fashion marketing needs. Her development, discussed in detail in Chapter 5,

complements the questionnaire findings and offers insights into the potentials and challenges of AI-driven influencer marketing.

3.4 Subject Matter Expert (SME) Analysis

In addition to the questionnaire and Celeste's development, a subject matter expert (SME) analysis was conducted to gain professional insights into the viability of AI influencers in digital marketing. Five marketing professionals from various industries were invited to evaluate Celeste's potential and provide feedback on the challenges and opportunities of AI-driven influencer marketing. Their responses helped contextualize the consumer data and assess how businesses perceive AI influencers within contemporary marketing strategies. The expert analysis was structured as a short presentation of Celeste, followed by a ten-question questionnaire assessing her visual appeal, engagement potential, and industry viability. This qualitative input enriched the research findings, complementing both the consumer survey and Celeste's development as a case study.

3.5 Challenges and Limitations

The methodology pursued in this research provided valuable information yet some challenges and limitations were encountered and should be acknowledged when interpreting the findings.

- **Questionnaire Design:** While the questionnaire was designed to be effective with care, some subjective aspects of consumer behavior may have not been fully captured.
- **Level of Subjectivity of Participants:** The analysis of ethical concerns relies on respondents' self-reported perceptions and they may be influenced by individual biases or limited understanding of AI technologies.
- **Virtual Influencer/ Case Study:** Celeste's development is just a single example of an AI influencer, which may not account broadly for virtual influencers.
- **Sample Size of Expert Analysis:** The SME analysis included only five experts, which may not fully represent all industry perspectives. A larger expert sample could have provided more diverse viewpoints.

The mixed-methods approach shaped the framework of a balanced analysis to understand the dynamics of influencer marketing and AI-driven campaigns. The results of this work are presented in detail in the next chapters.

4. Findings and Analysis

This chapter presents the results of the questionnaire distributed to 147 participants and analyzes the collected data. The primary goal of this chapter is to look for any patterns or relationships in the data and explore how different groups apprehend and interact with human and AI influencers.

The questionnaire examined how consumers engage with influencer marketing and their thoughts about the role of AI in the fashion industry. The findings are structured into sections to understand respondents' demographic characteristics, behaviors and perceptions of human influencers, and attitudes towards AI influencers. The chapter also investigates the ethical concerns surrounding AI-driven marketing and provides comparative analyses across some demographics and behaviors. The results help answer the research questions that were outlined in Chapter 3 and set a foundation for understanding the broader implications of influencer marketing.

4.1 Demographic Profile of Respondents

To understand the composition of the sample and contextualize the findings of this study, this section provides an overview of the demographic characteristics of the participants who responded to the questionnaire.

Gender Distribution

The sample consisted of 76.2% females, 23.1% males and 0.7% other/non-binary.

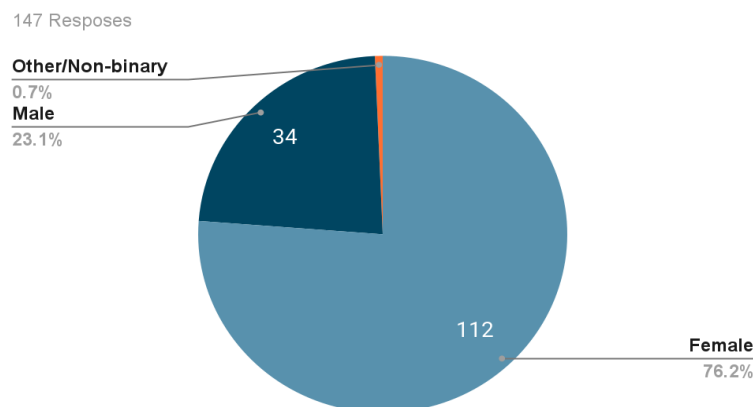


Figure 4 1 Gender Distribution

Age Group Distribution

Respondents were categorized into four age groups: 10.9% were aged 18-24, 44.2% were aged 25-34, 27.9% were aged 35-44 and 17.0% were aged over 44. This demographic aligns with the study's focus on individuals who are active on social media and likely to engage with influencer marketing.

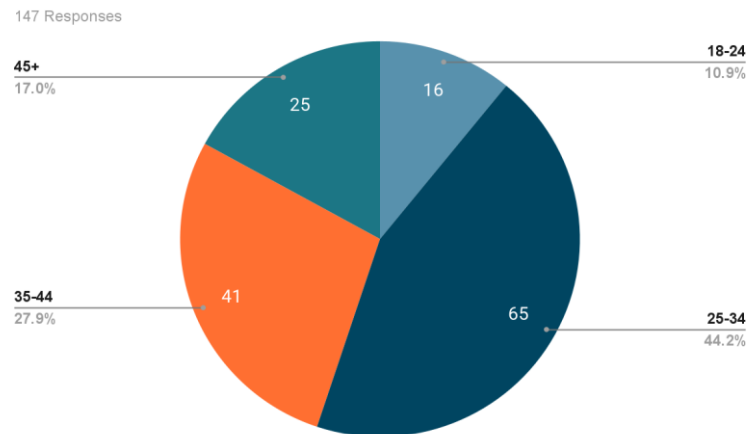


Figure 4 2 Age Group Distribution

Income Level Distribution

Participants self-reported their income levels as follows: 15.0% identified as having a low income, 70.1% as middle income, 5.4% as high income, and 9.5% preferred not to answer. The fashion industry offers a wide range of consumer goods, from luxury to budget-friendly. This approach allowed participants to classify their income based on their personal perceptions because for instance, an individual with a relatively low income may still find it sufficient to meet his fashion needs with budget-friendly items.

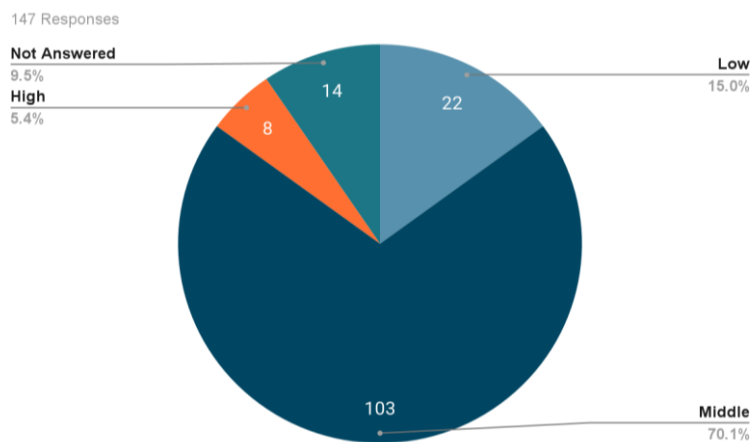


Figure 4 3 Income Level Distribution

4.2 Consumer Behavior and Perceptions of Influencers

This section analyzes the responses related to consumer behavior and their perceptions of human influencers.

Frequency of Online Fashion Purchases

The data revealed that 1.36% of the respondents shop online once a week, 19.05% once a month, 39.46% many times a year, and 40.14% rarely shop online for fashion products.



Figure 4 4 Frequency of Online Fashion Purchases

Trust in Influencers

When asked which type of influencers they trust the most, 55.1% of respondents preferred everyday people, 21.8% preferred fashion experts, 7.5% preferred celebrities, and 15.6% answered other or nobody.

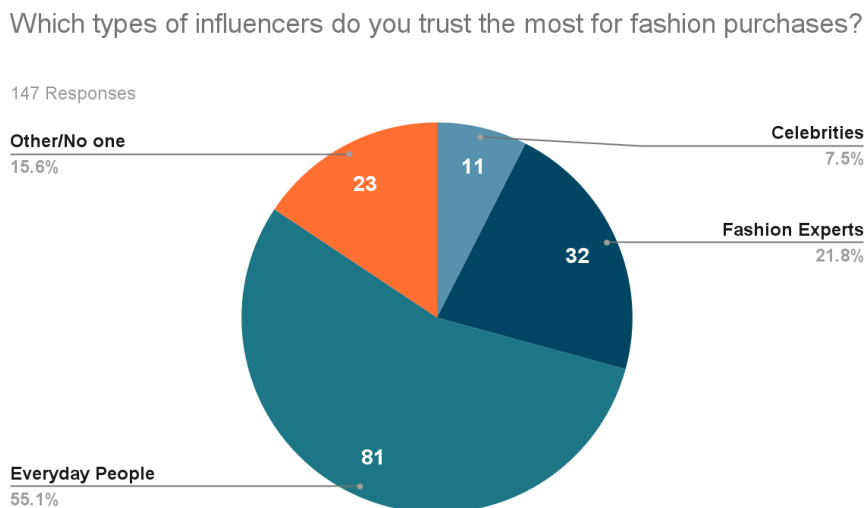


Figure 4 5 Trust in Influencers

Discovery of Influencers

The data shows that 82.3% of participants primarily discover fashion influencers through social media. Another 7.5% reported brand campaigns as their main source, 0.7% from blogs, and 9.5% indicated other channels.

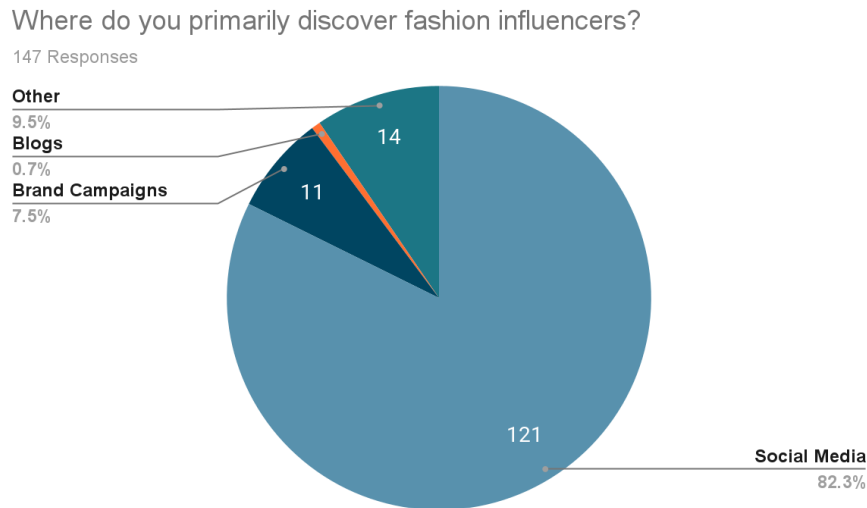


Figure 4 6 Discovery of Influencers

Platform Interaction

The majority of respondents, 63.3% cited that they mostly interact with influencers through Instagram. Another 14.3% of them interact mostly through TikTok, 10.2% interact through YouTube, 9.5% interact through Facebook, while 2.7% of them do not interact at all.

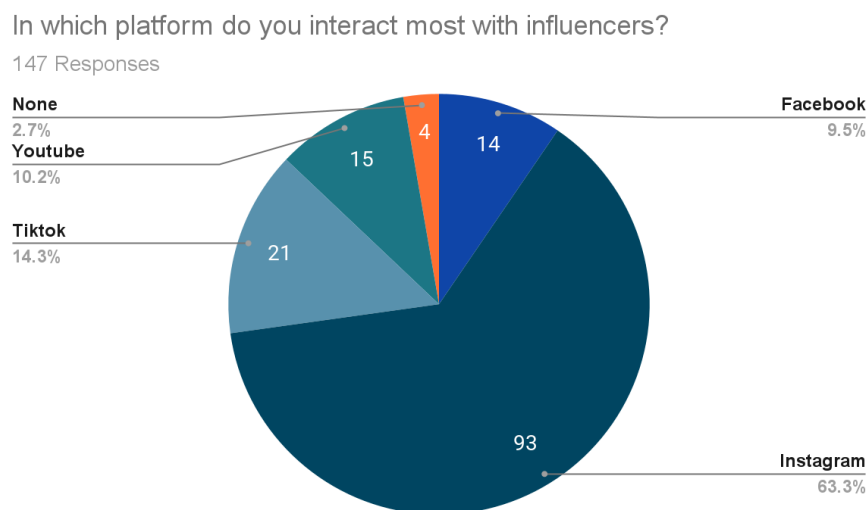


Figure 4 7 Platform Interaction

Characteristics of Influencers

Participants identified several traits that make an influencer appealing. Authenticity with 69 points and creativity with 66 points are the most valued traits for participants to follow an influencer. Expertise with 41 votes and collaborations with brands with 34 votes are also important and last is the engagement with followers with 29 votes.

Which traits make you follow a specific influencer?

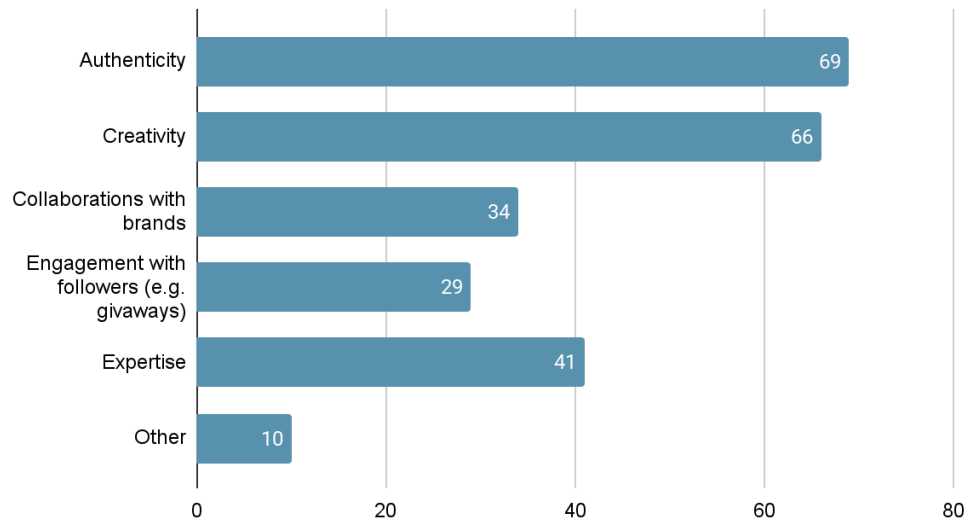


Figure 4 8 Valued Characteristics of Influencers

Transparency in Sponsorships

When asked how they feel when an influencer discloses sponsorships, 61.22% of the participants said that it is more likely to trust them, 8.16% said that it is less likely to trust them, while 30.61% said that they are not affected at all.

How do you feel when influencers disclose their sponsorships?		
More likely to trust them	90	61.22%
Less likely to trust them	12	8.16%
No effect on my trust	45	30.61%

Table 4 1 Transparency in Sponsorships

Factors Influencing Purchases

The questionnaire revealed that price, 91 votes, and product quality, 89 votes, are the most important factors when deciding to purchase an item promoted by an influencer. Product relevance is the next most important factor, selected by 37 participants, followed by influencer's trustworthiness with 18 votes and 6 participants cited that are influenced by other factors or they are not influenced at all.

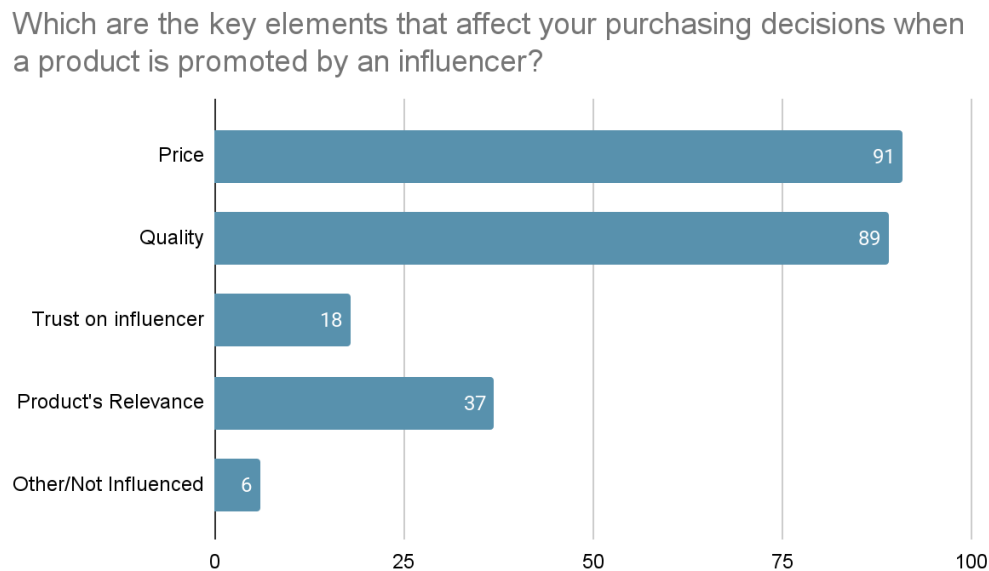


Figure 4 9 Factors Influencing Purchases

The analysis of consumer behavior and perceptions highlights some key points. While many people shop online, most limit their purchases to only a few times a year. Authenticity and creativity stand out as the most important traits for building trust in influencers, with everyday people being the most trusted type. Social media, particularly Instagram, dominates as the primary platform for influencer discovery and interaction. Trust also gets a big boost when influencers are transparent about sponsorships. Last but not least, practical factors like price and product quality are the primary drivers regarding purchasing decisions.

4.3 Potentials and Challenges of AI Influencers

This section examines the role of AI influencers in shaping consumers' opinions and their potential in the fashion industry.

Awareness and Interaction with AI Influencers

The majority of the participants (76.9%) have never heard or interacted with AI influencers, while 15.66% of them were not sure. Only 11 out of 147 of them (7.5%) have heard or interacted with AI influencers.

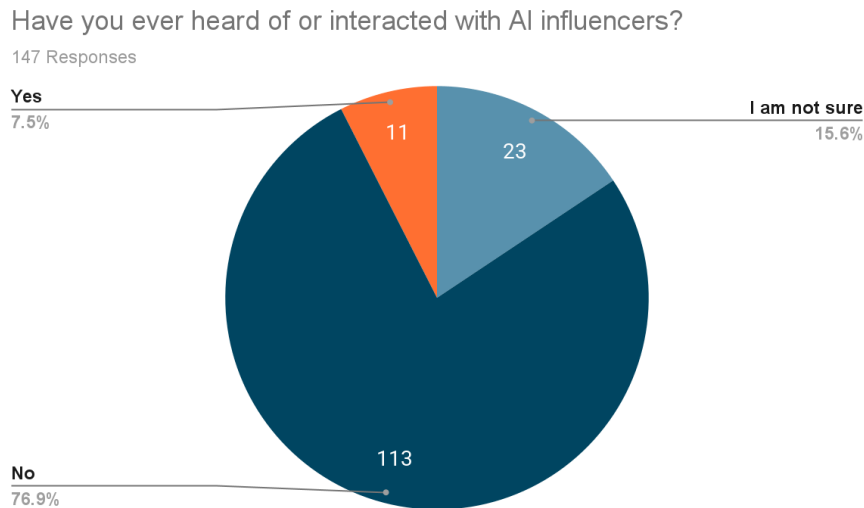


Figure 4 10 Awareness and Interaction with AI Influencers

Trust in AI Influencers

The Likert scale graph illustrates the respondents' trust in AI influencers compared to human influencers on a scale from 1 (lowest trust) to 5 (highest trust). With a significant number of respondents selecting scores 1 and 2, the distribution shows that trust in AI influencers is generally low. Scores 3 and 4 represent a medium level of trust, but they appear less frequent. Very few respondents indicated the highest trust level (5), indicating it is challenging for AI influencers to establish credibility compared to human influencers.

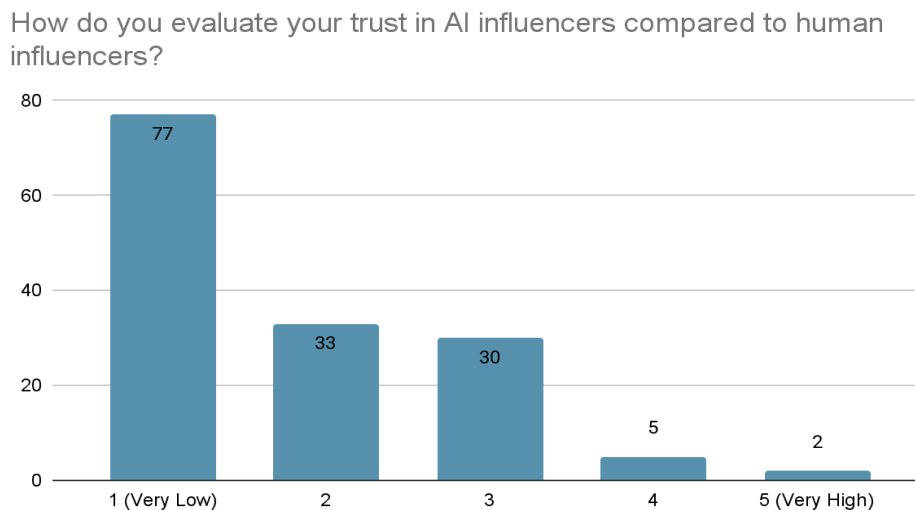


Figure 4 11 Trust in AI Influencers

Perceived Benefits of AI Influencers

The following graph showcases the advantages of AI influencers in fashion marketing, as identified by respondents. The most frequently cited advantages were lower cost (70 times) and innovation (32 times), reflecting the perception that AI influencers can bring creative approaches and financial efficiency to marketing strategies. A smaller proportion of respondents cited stability (16 times) and interestingly, a significant number of respondents selected none, indicating a lack of belief in the benefits of AI influencers.

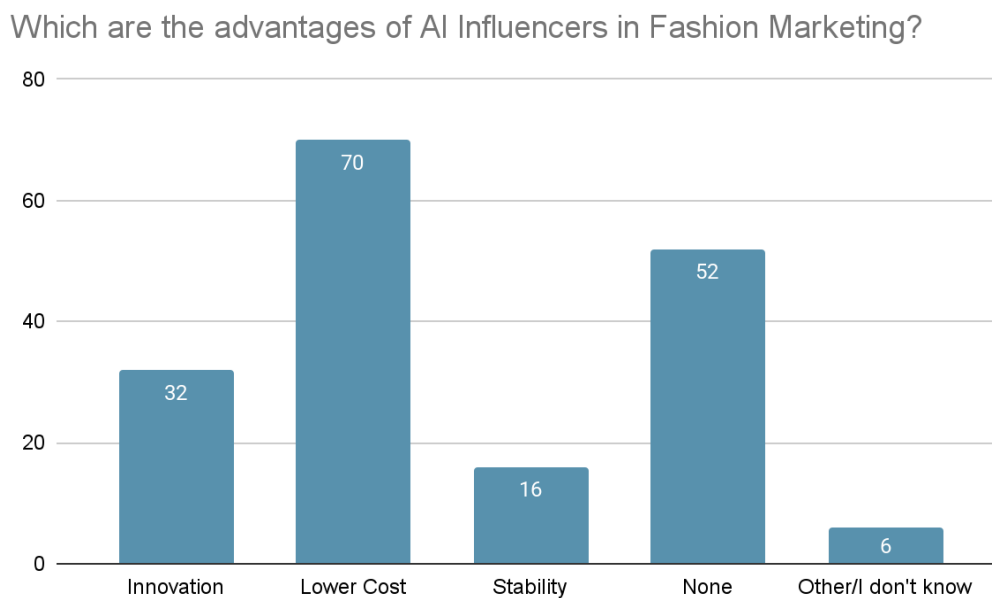


Figure 4 12 Perceived Benefits of AI Influencers

Concerns about AI Influencers

The most prominent concern, identified by 76 respondents, is consumer manipulation, indicating fears about AI influencers. This is followed by lack of authenticity (68 respondents) and moral concerns (63 respondents). Trust issues were highlighted by 59 respondents, reflecting doubts about the credibility of AI influencers. Additionally, lack of transparency was a concern for 47 respondents, emphasizing the importance of clear disclosure of AI in campaigns. Notably, 18 participants responded they had no concerns, and a small number (6 respondents) cited other concerns grouped as Other.

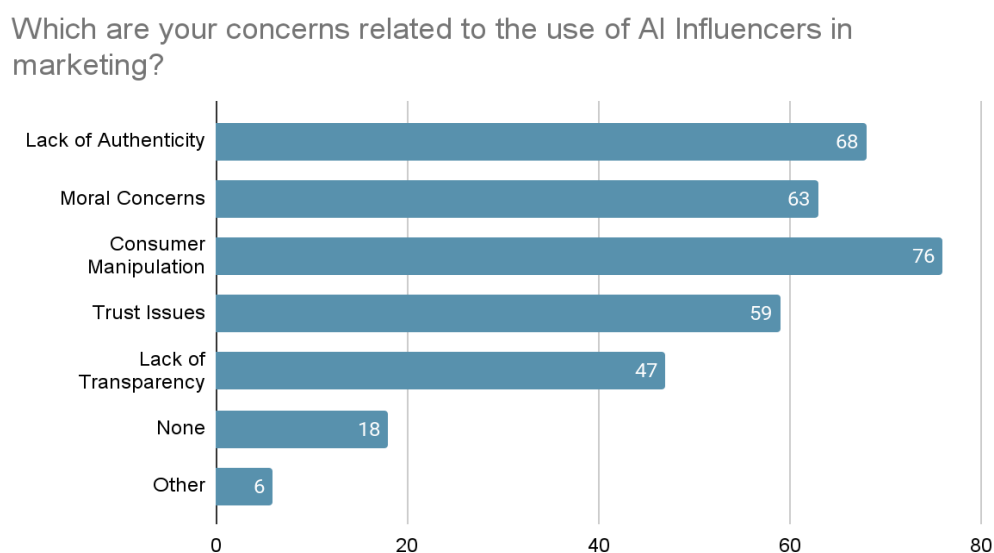


Figure 4 13 Concerns about AI Influencers

The findings in this section reveal both the potentials and challenges associated with AI influencers in the fashion industry. Despite their growing role, awareness and interaction with them still remains limited with the majority of participants (76.9%) being unfamiliar with AI influencers and only 7.5% having interacted with them. This limited exposure is accompanied by low trust levels, as indicated by the Likert scale results, where most respondents expressed skepticism about AI influencers compared to human influencers.

On the positive side, it is perceived that AI influencers offer some tangible benefits, such as lower cost and innovation, which align with the industry's goals for financial efficiency and creativity.

The concerns surrounding AI influencers remain prominent. The fear of consumer manipulation is the leading concern, followed closely by issues of authenticity, moral implications, and transparency. These findings point out that ethical and transparent practices are needed to soften trust and credibility issues, which are the main barriers to virtual influencers' acceptance.

4.4 Ethical Concerns

Transparency in AI Marketing

When asked if they believe that brands should disclose the use of AI in their marketing campaigns, the majority of the respondents (75.5%) said that they should, indicating strong support for transparency. A small percentage (13.6%) was unsure and an even smaller (10.9%) disagreed.

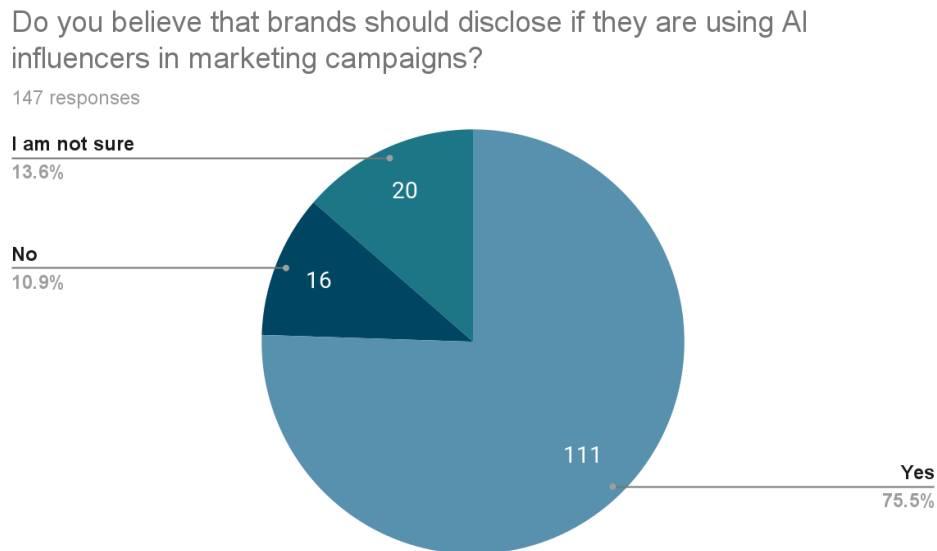


Figure 4 14 Transparency in AI Marketing

Consumer Manipulation

When asked if they believe that AI influencers can manipulate consumer behavior more than human influencers, the participants showed mixed opinions. An important part (41.5%) believes that AI influencers have a stronger ability to manipulate consumer behavior while a comparable portion (34.7%) disagrees. It should be mentioned that a notable percentage of 23.8% is uncertain, implying a lack of understanding about the influence of AI.

Do you believe that AI influencers can manipulate consumer behavior more than human influencers?

147 Responses

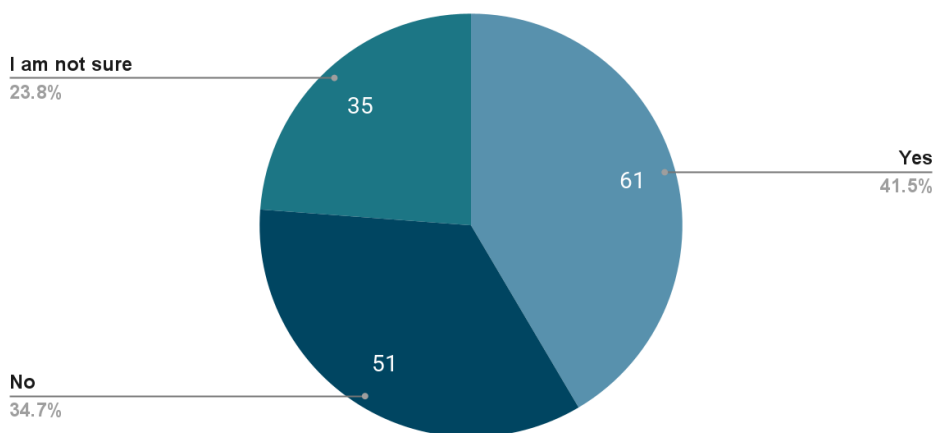


Figure 4 15 Consumer Manipulation

Support for Ethical AI Use

The Likert scale graph demonstrates the respondent's likelihood to support a fashion brand that prioritizes transparency and the ethical use of AI on a scale from 1 (Very Impossible) to 5 (Very Possible). While the majority of respondents remain neutral, more responses turn toward the lower scale (1 and 2) compared to the higher (4 and 5). This distribution indicates that whilst transparency and ethical use of AI are appreciated, they are not yet a strong motive for this audience to support a brand.

How likely are you to support a fashion brand that prioritizes transparency and the ethical use of AI?

147 Responses

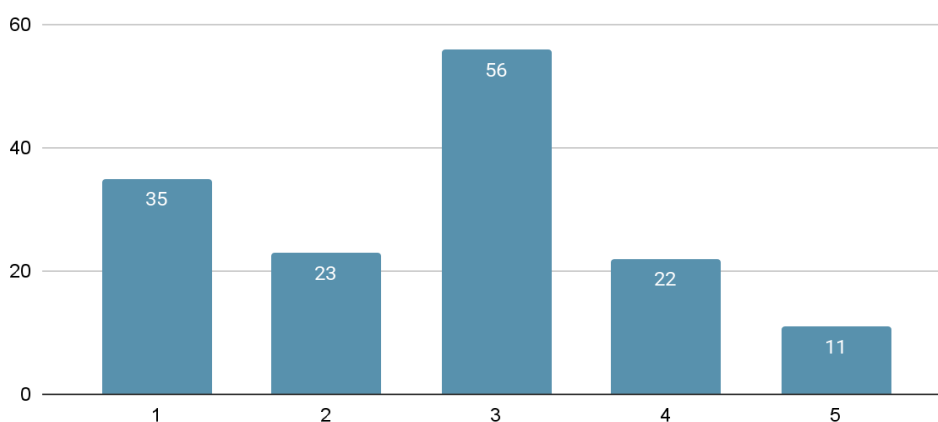


Figure 4 16 Support for Ethical AI Use

Future of Fashion Marketing

In the final question, participants were asked to reveal their perceptions about how the rise of AI influencers will impact the future of fashion marketing. Most of the participants (60.5%) are uncertain about the impact, 32.7% of them believe that the impact will be negative and only a small percentage of 6.8% view the rise of AI influencers as a positive development. The results showcase widespread uncertainty, with more respondents leaning toward a negative outlook than a positive one.

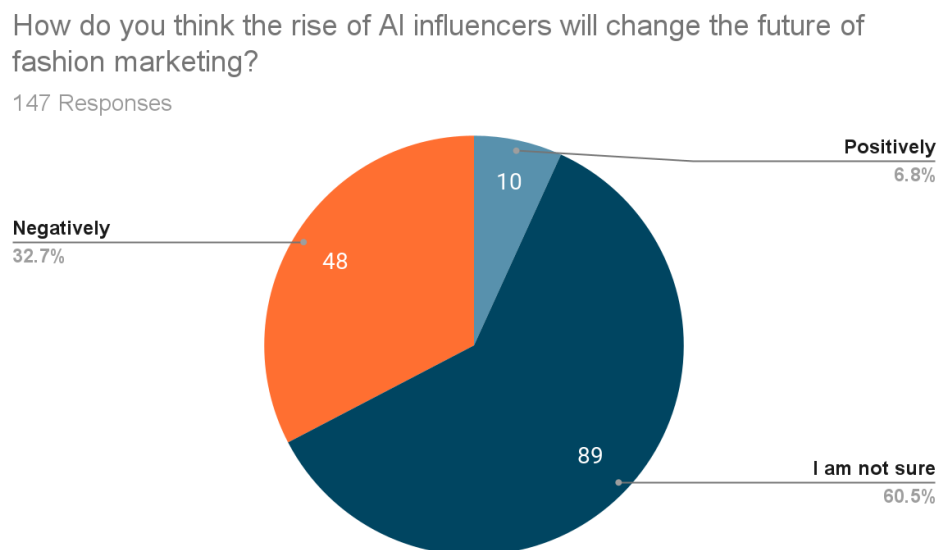


Figure 4 17 Future of Fashion Marketing

The findings in this section reveal that there is strong support for transparency in AI-driven campaigns, with 75.5% of respondents agreeing that brands should disclose the use of AI influencers. However, opinions on the manipulative power of AI influencers remain divided, as 41.5% believe AI influencers can manipulate consumer behavior more than human influencers, while 34.7% disagree, and 23.8% express uncertainty. When it comes to supporting brands that prioritize transparency and ethical AI use, responses show a neutral to slightly negative tendency, suggesting that while transparency and ethical considerations are valued, they are not yet compelling motivators for brand loyalty. These insights highlight the importance of increasing awareness and trust regarding the ethical use of AI in fashion marketing to engage consumers better

4.5 Cross-Comparative Analysis

Age Group & Characteristics that make someone follow an Influencer

The table shows how respondents of all age groups (18-24, 25-34, 35-44, 45+) value the characteristics of an influencer.

	Influencers' Traits					
Age Group	Authenticity	Creativity	Collabs	Engagement	Expertise	Other
18-24	10	9	5	4	4	1
25-34	41	36	9	12	21	3
35-44	14	14	13	7	9	4
45+	4	7	5	6	7	2

Table 4 2 Cross-Comparative Analysis: Age Group & Characteristics

Across all age groups, authenticity and creativity are the most important characteristics. At the same time, older participants seem to appreciate more professional traits such as expertise and engagement.

Exposure to AI Influencers & Manipulation of Consumer Behavior

The table shows the relationship between exposure to AI influencers and belief in their ability to manipulate consumer behavior more than human influencers.

Heard / Interacted with an AI Influencer	AI influencers can manipulate more consumer behavior than human influencers			
	Yes	No	I'm not sure	Sum
Yes	4	4	3	11
No	48	38	27	113
I'm not sure	10	8	5	23
Sum	62	50	35	147

Table 4 3 Cross-Comparative Analysis: Exposure to AI Influencers & Manipulation of Consumer Behavior

Among respondents with direct exposure to AI influencers, opinions are relatively balanced across all categories. The number of people who find them more manipulative is equal to those who do not so there is not a clear consensus. Those who are uncertain about their exposure to AI influencers tend to either believe AI influencers are more manipulative or are unsure, indicating a general lack of familiarity or strong opinions about AI influencers. Among those who have not interacted with AI influencers, opinions are divided. However, the largest group believes that AI influencers are more manipulative than human influencers.

Age Group & Future of Fashion Marketing

The table shows how respondents of all age groups (18-24, 25-34, 35-44, 45+) perceive the rise of AI influencers is going to impact the future of fashion marketing.

	Impact on the Future of Fashion Marketing			
Age Group	Positively	Negatively	I'm not sure	Sum
18-24	2	6	8	16
25-34	5	20	40	65
35-44	3	13	25	41
45+	0	9	16	25

Table 4 4 Cross-Comparative Analysis: Age Group & Future of Fashion Marketing

The age group 18-24 is mostly unsure about the future with a slight tendency to view the impact negatively. The age group 25-34 is also overwhelmingly unsure, a notable portion sees the rise of AI influencers as negative and positive responses are very little. The age group 35-44 has a significant number of uncertain responses, with negativity being more prominent than positivity. The oldest group is the most skeptical or uncertain about AI influencers, with no respondents seeing a positive impact.

Across all age groups, uncertainty is the dominant attitude and presents an opportunity to educate consumers about the role of AI in marketing. While younger age groups are less negative, they are not overwhelmingly positive. Older age groups are less optimistic about the impact of AI influencers.

Exposure to AI & Future of Fashion Marketing

The following table illustrates a cross-analysis between exposure to AI influencers and opinions on how the rise of AI influencers will impact the future of fashion marketing.

Heard / Interacted with an AI Influencer	AI influencers can manipulate more consumer behavior than human influencers			
	Positively	Negatively	I'm not sure	Sum
Yes	1	3	7	11
No	8	40	65	113
I'm not sure	1	5	17	23
Sum	10	48	89	147

Table 4 5 Cross-Comparative Analysis: Exposure to AI & Future of Fashion Marketing

Across all levels of exposure uncertainty is the most common response. Negative opinions are most prominent after uncertainty, particularly among those without exposure which might indicate mistrust of AI in general. Positive perceptions are rare across all groups, even among those exposed to AI influencers, highlighting the need for marketers to showcase the benefits of AI-driven campaigns.

4.6 Summary

Chapter Four dealt with the findings of the questionnaire and explored the behaviors, preferences, and concerns of consumers when it comes to influencer marketing.

The insights gained from this analysis inspired the decision to create “Celeste” and bridge the gap between theoretical concepts and practical application. Celeste is a virtual influencer

designed to engage with young audiences by prioritizing authenticity and ethical practices to cope with the skepticism that was revealed from the analyzed data and showcase the creative and innovative side of artificial intelligence in the marketing field.

For the next steps of this research, the following chapter introduces the technical process and tools behind Celeste's development—a case study in leveraging AI to shape a new approach to influencer marketing.

5. Development of Celeste: Tools and Process

As discussed previously, the evolution of artificial intelligence has reshaped many industries, and marketing could not be an exception. There are plenty of innovative tools regarding marketing strategies and AI-generated virtual influencers are emerging as a unique way to engage audiences.

This chapter dives into the conception and creation of Celeste, a virtual influencer developed as part of this research in order to explore the potentials, challenges, and implications of using AI-driven personas in the fashion industry. It outlines the initial concept, the selection of the appropriate development tools, and the steps taken during the creation process.

5.1 Conceptualization of Celeste

Celeste's development was guided by a commitment to blending creativity with technology. The pivotal step of this attempt was to build her visual identity, personality, and role as a virtual influencer. The primary goal was to design a digital persona that would be both relatable and inspirational to engage with modern audiences while still reflecting some values such as sustainability and inclusivity.

The name 'Celeste' was chosen to reflect her unique identity as a virtual influencer. Derived from the Latin word 'caelestis' (Celeste in modern usage), it means 'heavenly' or 'from the heavens' and is often used in astronomy to describe celestial bodies. This name was intentionally selected to subtly indicate Celeste's non-human nature while maintaining a sophisticated and elegant appeal.

Her target audience is young adults. Gen Z people aged 18 to 24 years who are tech-savvy and value sustainability and authenticity in brands and young Millennials aged 25 to 30 years old, career-oriented individuals that look for fashionable yet eco-conscious fashion.

Celeste's personality had to be thoughtful and ambitious to foster a sense of trust and authenticity. She is an advocate for sustainable fashion and promotes eco-conscious living and ethical consumption.

Her visual identity was designed to be both distinct and approachable. Hazel eyes were selected to convey warmth and also provide a neutral aesthetic that complements various outfits and expressions. Brown hair reflects a natural and grounded appearance. The wavy hairstyle adds an element of playfulness, making her more relatable to younger audiences. Her soft features and expressive eyes were chosen to build an emotional connection with her audience and raise trust and credibility. She has a healthy and balanced athletic physique that promotes a message of body positivity and challenges unrealistic beauty standards. Her total structure reflects a European identity, without defining a specific origin to avoid limiting her global appeal.

5.2 Development Tools and Technologies

Celeste was developed exclusively using advanced artificial intelligence tools in particular Kling AI and Freepik.

Kling AI is an advanced artificial intelligence platform by Kuaishou Technology, a Chinese tech company. It specializes in generating high-quality videos from static images and text descriptions.

Key Functions:

- **Text-to-Image Generation:** This function allows users to generate AI images from a text description.
- **Reference/Base Image:** This is a very useful parameter in Text-to-Image Generation where a user can upload a reference or base image to generate image results related to the content of the reference image.
- **Text-to-Video Generation:** This tool can create cinematic-quality videos from just a text description. The generated videos are either 5 or 10 seconds long, and there are two generation modes available: the “Standard Mode” for quick video production and the “Professional Mode” for higher video quality.
- **Image-to-Video:** With this function, users can generate a dynamic video by inputting a static image. With the addition of a text description, the model can bring to life the scenery depicted in the reference image.

- **Lip Sync:** Lip Sync is an advanced feature after the video generation process. It allows users to upload a voiceover file or create audio through “Text-to-Speech” and synchronizes the character’s lip movement with the audio, making them appear as speaking.
- **AI Virtual Try-On:** This practical tool is ideal for fashion marketing needs. It allows users to upload, generate, or select one of the default models and choose one or two garments for the model to wear. The output consists of up to four images of the selected model dressed in the chosen outfit displayed on a neutral background. Additionally, the generated images can be transferred to the Image-to-Video function, bringing them to life for more dynamic and engaging results.

Kling AI also provides some other helpful functions for generating AI content such as camera movement through a video, motion brush, etc. that were not essential for the requirements of this research.

Freepik is part of Freepik Company, a Spanish technology company that also offers other creative platforms like Flaticon, Slides, and Storyset. Freepik is a widely-used online platform for creating and editing audiovisual content addressing to designers, content creators, marketers, and other professionals who need visual assets. It offers AI-driven design tools, AI-generated images, and a growing library of stock photos, illustrations, and vector graphics, all provided through a freemium business model.

Key functions that were used for Celeste’s development:

- **Text-to-Image:** This feature works similarly to Kling AI, generating images from text descriptions. It also offers some additional tools where that allow users to select the style of the generated image-for instance retro, cartoon, portrait, and many more, and apply a special effect about the color, the lighting, or the camera as well.
- **Custom Characters:** This AI processing tool only available with paid subscriptions, creates custom and consistent characters. The produced characters can then be used in the Image or Video-Generating tools to create tailored content.

5.3 Step-by-Step Process

Regarding Celeste's development, as previously discussed the purpose was to create an AI-generated persona that would be relatable to the Greek audience and appealing to fashion industry marketing requirements.

The first tool utilized was Text-to-Image Generation by Kling AI.

The given prompt that generated a satisfactory result was: "1woman, female focus, name Celeste, 25 years old, neutral brown hair with subtle highlights, shoulder length and wavy hair, large hazel eyes, natural makeup, bold eyeshadow, nude lips, playing piano, smiling, pink sweater, long sleeves, in her bedroom, realistic" set in 2:3 aspect ratio and generating count four images.

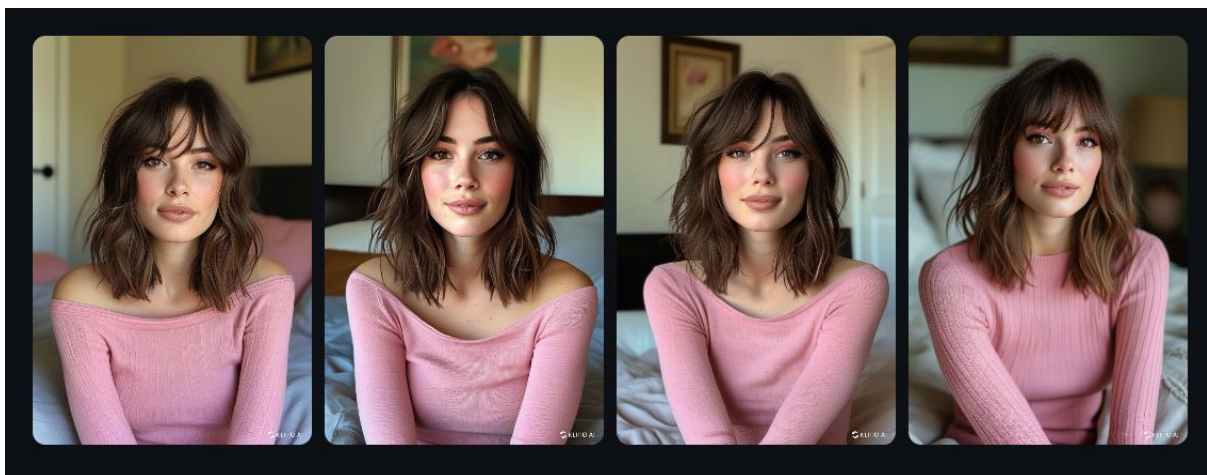


Figure 5 1 First Satisfactory Result for Celeste

At this point, the challenge was to generate images of Celeste in different clothes, backgrounds, activities, etc.

It is commonly discussed in online forums that when maintaining the same prompt and only altering the action, in this case [playing the piano], the expression, in this case [smiling], and the surrounding, in this case [her bedroom] Kling AI generates content that matches the initial character. However, this didn't work with Celeste.

When the prompt was adjusted as advised: “1woman, female focus, name Celeste, 25 years old, neutral brown hair with subtle highlights, shoulder length and wavy hair, large hazel eyes, natural makeup, bold eyeshadow, nude lips, playing tennis, smiling, pink sweater, long sleeves, in a tennis court with a white net and green tennis balls, realistic” set in 2:3 aspect ratio and generating count four images. The results did not meet the expectations. The woman generated had the same characteristics as the initial one but was very dissimilar.

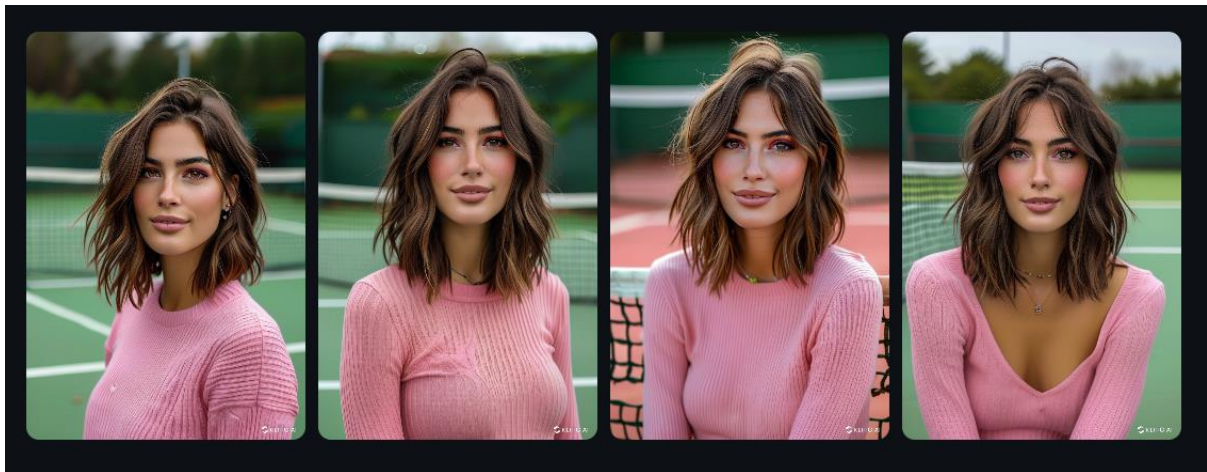


Figure 5 2 Failed Attempt 1

On the second attempt, the prompt was adjusted similarly: “1woman, female focus, name Celeste, 25 years old, neutral brown hair with subtle highlights, shoulder length and wavy hair, large hazel eyes, natural makeup, bold eyeshadow, nude lips, drinking coffee, smiling, pink sweater, long sleeves, in her kitchen, realistic”. The Image Reference tool was used as well. As a Reference Image, the fourth image generated from the first prompt was input in zero Reference Strength in an attempt to change the background and the action while maintaining the character. However, the content generated was inadequate for another time. The woman created was closer to the intended one than the second try, it still did not fully match the desired result.

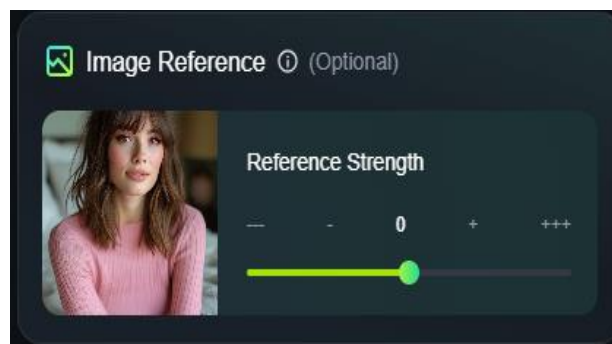


Figure 5 3 Image Reference

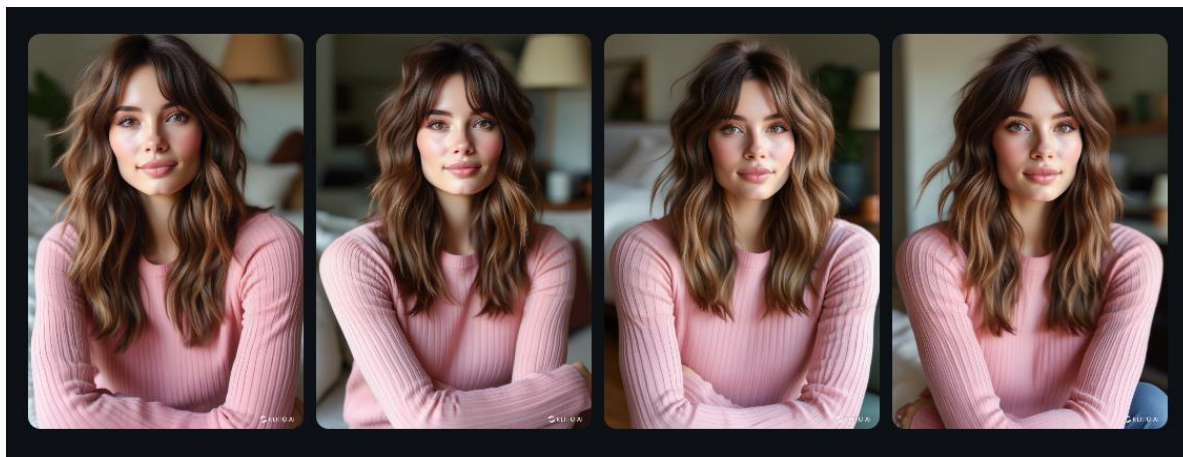


Figure 5 4 Failed Attempt 2

The following are some fruitless attempts to maintain the same character while changing the action and the background in the text prompt and fluctuating the Reference Strength.

Prompt: drinking coffee, in her kitchen. Reference Strength: Very High

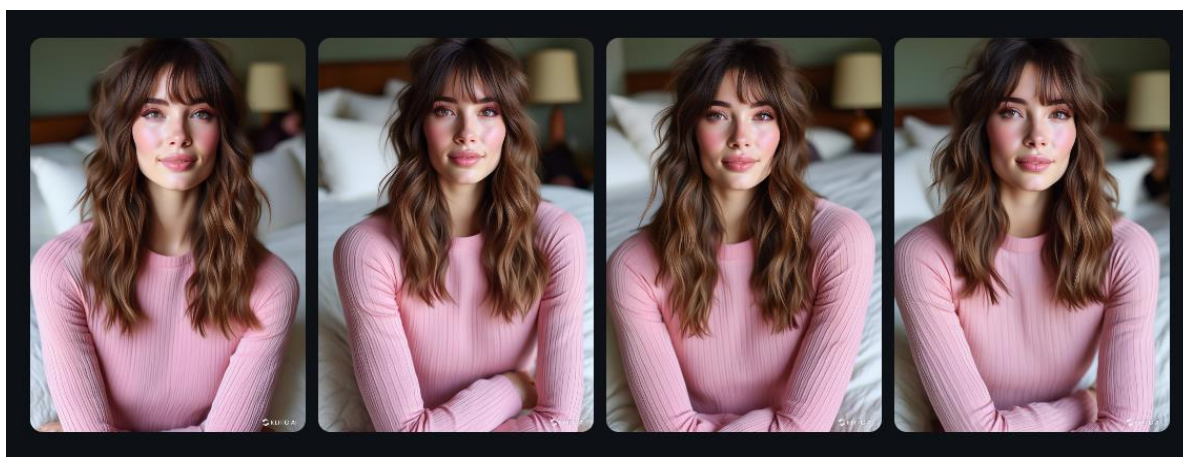


Figure 5 5 Failed Attempt 3

Prompt: studying with a laptop, in a classroom. Reference Strength: Negative

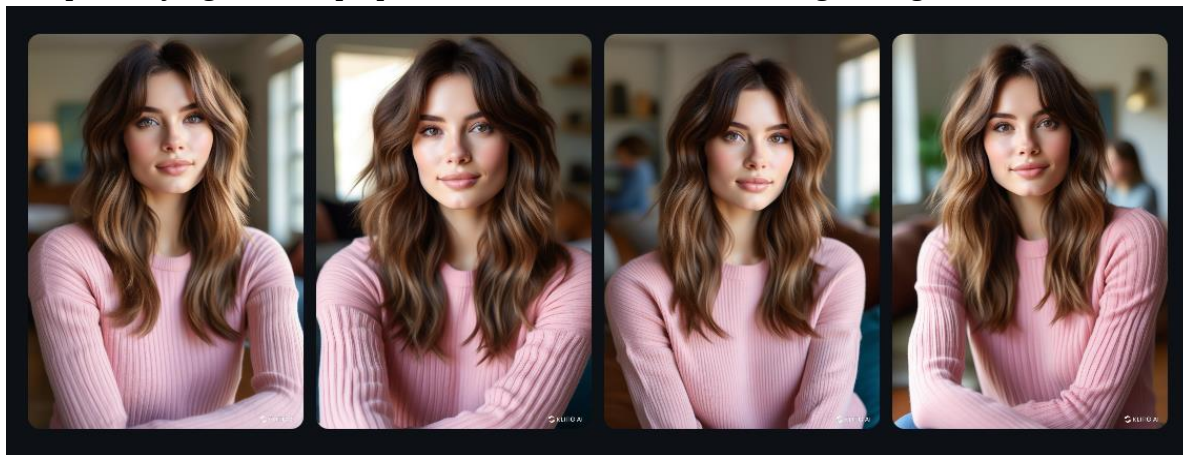


Figure 5 6 Failed Attempt 4

The most crucial challenge in Celeste's development was upholding the main character's consistency.

The first solution that arose was to use the AI-Custom-Model function from Kling AI. This function leverages advanced AI and machine learning to train a model on a specific face and generates content that maintains character consistency across different scenarios. This solution was quite time-consuming, since the function requires at least sixteen videos from various aspects depicting the persona, to train the model. Thus, the optimal method to build character consistency was to utilize the Custom Characters tool from the Freepik platform which operates likewise but requires at least eight images to train the model.

Therefore, back to Kling AI and the Text-to-Image tool giving the prompt: “1 woman, female focus, name Celeste, 25 years old, neutral brown hair with subtle highlights, shoulder length and wavy hair, large hazel eyes, natural makeup, bold eyeshadow, nude lips, reading a book, smiling, pink sweater, long sleeves, in her bedroom, realistic” set in 2:3 aspect ratio but this time generating count to nine images so eight of them could be used to train the model at Freepik. The results met the expectations and one image was not used because some facial characteristics differed slightly.



Figure 5 7 Generation of 9 Images

Eight images were uploaded to the Custom Characters function at Freepik and fortunately, a consistent character named “Celeste” was created.

Eventually, with the Text-To-Image function from Freepik, Celeste can be placed anywhere, doing or wearing anything based on a text prompt. The following examples depict Celeste as an everyday woman in her daily life.

Example number 1, prompt: “Every day full body photo of @celeste in an urban environment in a cool but chic outfit with minimal jewelry”



Figure 5 8 Example no 1

Example number 2, prompt: “Every day full body photo of @celeste in an urban environment in a plaid blazer and skirt with big red headphones”



Figure 5 9 Example no 2

Example number 3, prompt: “@celeste drinking Pina Colada in a pink bikini at a beach bar laughing”



Figure 5 10 Example no 3

Example number 4, prompt: “@celeste in an office environment, sitting behind a laptop”



Figure 5 11 Example no 4

Example number 5, prompt: “@celeste wearing a fitness outfit running at a park”

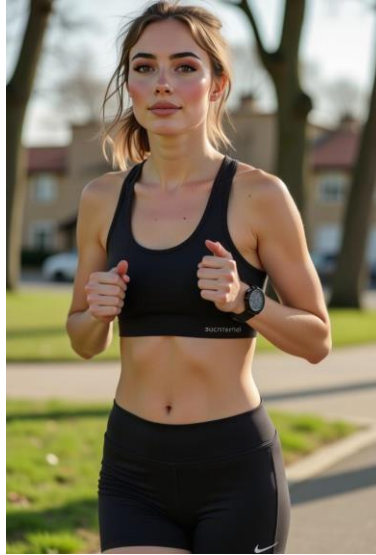


Figure 5 12 Example no 5

Example number 6, prompt: “@celeste wearing a white shirt, standing, holding a book slightly smiling”



Figure 5 13 Example no 6

All the images generated from Freepik can be uploaded to Kling’s AI Image-to-Video function and come to life. In addition, if the Lip Sync feature is harnessed, Celeste’s lip movements are perfectly harmonized with the content of a Text-to-Speech generated audio or an uploaded one.

Last but not least, another valuable feature for fashion marketing offered by Kling AI is the AI Virtual Try-On. In the following attempt, a photo of Celeste was uploaded as the model reference, and two garments from Patagonia, LLC were selected to dress the model. The

generated image can easily be transformed into a video within Kling AI, and a text description can be used to define an action for Celeste—for example, making her walk down the street and turn around to showcase the outfit.

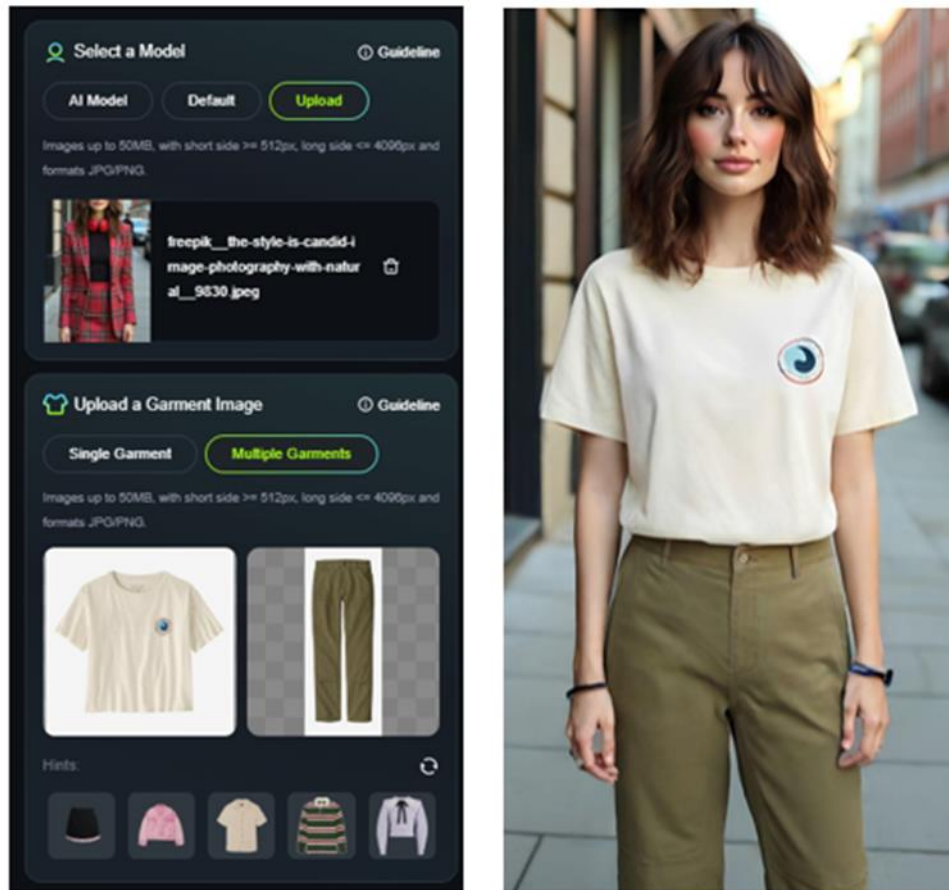


Figure 5 14 Virtual Try-On Tool

By harnessing the full potential of these advanced tools and combining the capabilities of both platforms, Celeste can be brought to life in any setting, engaging in any activity, and dressed in any style of choice. The generated content, whether high-quality images or dynamic videos, can be shared across social media platforms, enabling Celeste to emerge as a virtual influencer. This fusion of technology and creativity unlocks endless opportunities, transforming the way digital connections and inspirations are created.

5.4 Development Costs

Both Kling AI and Freepik offer free versions of their platforms, but these are insufficient for the tools required to create Celeste. To complete this project, it was necessary to unlock features available only through paid subscriptions.

The plan selected from Kling AI was “Pro”, costing €12.61 EUR (VAT included) an offer for the first month when billed monthly, with the flexibility to cancel at any time. This plan provides 3,000 credits per month for generating content. For reference, generating an image requires approximately 4 credits while generating a video approximately costs 20 to 35 credits, depending on the chosen quality and special effects.

The plan selected from Freepik was “Essential” which costs €9.92 EUR (VAT included) per month. This plan includes 7,000 credits monthly for AI tools and features. Training the model to create a character requires 5,500 credits while generating an image costs around 40 credits.

The reason why the video generation tool from Freepik was not utilized, was the better credit management. By strategically using the most affordable plans from each platform, the project achieved satisfactory results while ensuring the best balance between quality and cost.

Total Development Cost = €12.61 (Kling AI) + €9.92 (Freepik) = **€22.53 EUR**

The total development cost of €22.53 is a feasible initial investment considering the potential applications of AI influencers.

6. Subject Matter Expert Analysis

After Celeste's development was completed, it was essential to evaluate her potential through professional impressions. To achieve this, some marketing experts from various industries were reached and asked to assess how AI influencers like Celeste could fit within modern marketing strategies.

A short presentation was prepared, introducing Celeste as a marketing tool for the fashion industry, showcasing her visual identity, capabilities, and potential applications. This presentation was shared via email with five selected experts and alongside a structured ten-question questionnaire designed to collect their professional opinions. The goal of this analysis was to gain valuable insights into the strengths, challenges, and future potential of AI-driven influencers like Celeste from those directly involved in the marketing landscape.

6.1 Section One: General Impressions

To assess Celeste's potential as a virtual influencer, experts were first asked about their initial impressions of her visual appeal and persona. This was a critical aspect, as an influencer's appearance and branding play a key role in consumer engagement and brand collaborations.

1. Visual Appeal of Celeste

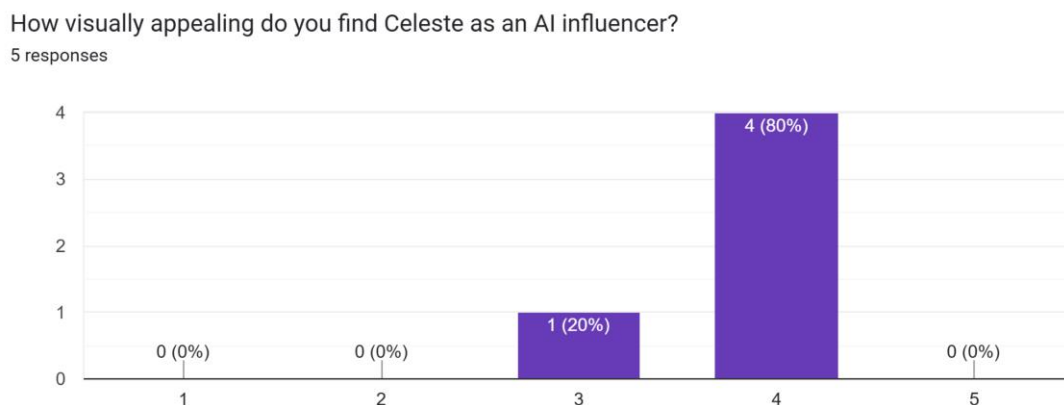


Figure 6 1 Visual Appeal of Celeste

The first question asked experts how visually appealing they find Celeste as an AI influencer. Responses were collected on a 5-point scale, where 1 represented "Not Appealing at All" and 5 represented "Extremely Appealing". The average rating for Celeste's visual appeal was 3.8

out of 5, indicating a generally positive reception from experts. Most experts rated her between 3 and 4, suggesting that while Celeste is visually appealing, there may still be room for refinement in her design to enhance engagement further.

2. Alignment with Modern Digital Marketing Needs

Do you think Celeste's appearance and persona align with modern digital marketing needs?
5 responses

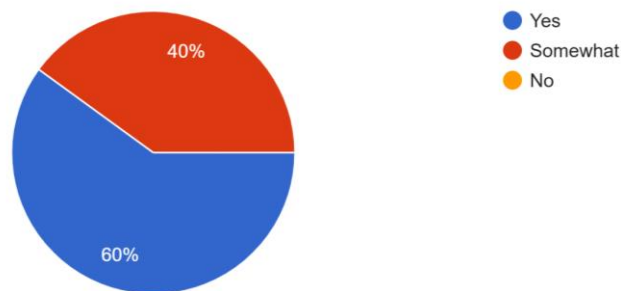


Figure 6 2 Alignment with Modern Digital Marketing Needs

The second question aimed to assess whether Celeste's appearance and persona align with contemporary marketing strategies:

- 3 experts (60%) responded "Yes", indicating that Celeste's branding fits well within the current digital marketing landscape.
- 2 experts (40%) selected "Somewhat", suggesting that while Celeste meets many modern marketing criteria, there may be aspects requiring further optimization.

3. Perceived Engagement Potential of Celeste

Do you think consumers would find Celeste engaging as an influencer?
5 responses

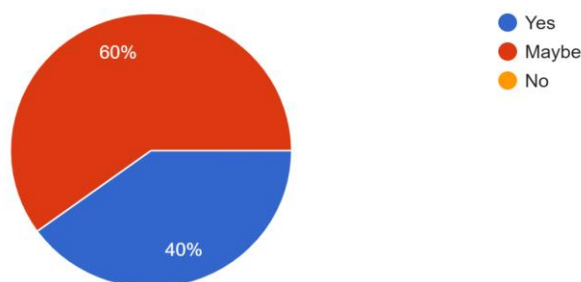


Figure 6 3 Perceived Engagement Potential of Celeste

The third question aimed to evaluate whether experts believe consumers would find Celeste engaging as an influencer:

- 2 experts (40%) responded "Yes", indicating confidence that Celeste could successfully engage audiences.
- 3 experts (60%) responded "Maybe", suggesting uncertainty about how well consumers would connect with her.

No experts dismissed Celeste's engagement potential, but the hesitation may suggest room for improvement in her content strategy, or interaction methods. Compared with the data collected from the consumers in Chapter 4, both experts and consumers recognize the potential of AI influencers, but engagement remains a challenge. Experts are optimistic, with most leaning towards "Maybe", while consumers expressed more skepticism toward AI influencers.

6.2 Section Two: Potential & Viability

Following the evaluation of Celeste's visual appeal and engagement potential, the next step was to assess the broader viability of AI influencers in digital marketing. Experts were asked to evaluate whether AI influencers like Celeste have a place in the industry, identifying their main advantages and lurking challenges.

4. Potential of AI Influencers in Digital Marketing

Do you see potential for AI influencers like Celeste in digital marketing?
5 responses

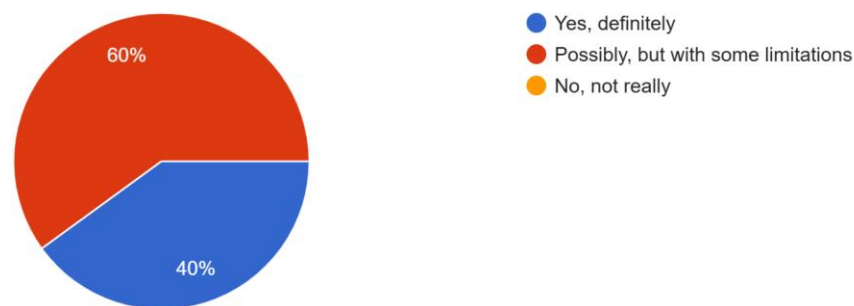


Figure 6 4 Potential of AI Influencers in Digital Marketing

The fourth question assessed expert opinions on the overall potential of AI influencers like Celeste in digital marketing:

- 2 experts (40%) responded "Yes, definitely", showing strong confidence in the role of AI influencers.
- 3 experts (60%) responded "Possibly, but with some limitations", indicating cautious optimism but acknowledging certain challenges.

In Chapter 4, consumer skepticism about AI influencers was evident and trust in AI influencers was significantly lower than in human influencers. The disconnect between expert enthusiasm and consumer skepticism suggests the need for more education and strategic branding to build consumer trust in AI-driven influencers.

5. Biggest Advantages of AI Influencers

Which of the following do you see as the biggest advantage of AI influencers like Celeste?
5 responses

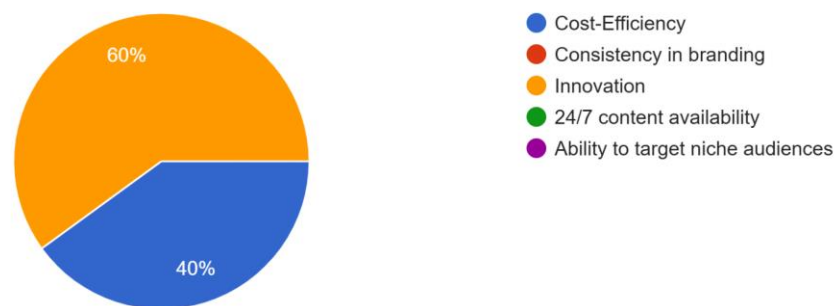


Figure 6 5 Biggest Advantages of AI Influencers

To understand what makes AI influencers like Celeste valuable in digital marketing, experts were asked what they consider their biggest advantage. Most of the experts (3) selected Innovation, disclosing AI influencers' ability to bring fresh approaches to digital marketing. Two experts chose Cost-Efficiency, emphasizing how AI influencers can reduce marketing costs compared to human influencers. Consumers were also asked in Chapter 4 their perceived benefits of AI influencers, Lower Cost and Innovation were the most frequently cited answers. Experts and consumers agree that cost-efficiency and innovation are the strongest advantages of AI influencers.

6. Biggest Challenges of AI Influencers

Which of the following do you see as the biggest challenge of AI influencers?

5 responses

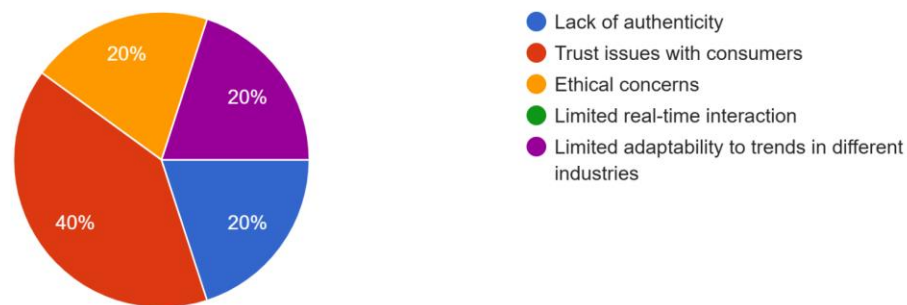


Figure 6 6 Biggest Challenges of AI Influencers

To assess the main barriers to AI influencer adoption, experts were asked to point out the biggest challenge associated with virtual influencers. The responses from experts in this section reveal diverse perspectives:

- 2 experts (40%) identified Trust Issues with Consumers as the biggest challenge.
- 1 expert (20%) cited Lack of Authenticity, emphasizing the difficulty AI influencers face in building real emotional connections.
- 1 expert (20%) chose Ethical Concerns, referring to transparency, manipulation risks, and data privacy.
- 1 expert (20%) pointed out Limited Adaptability to Trends, suggesting that AI influencers may struggle to keep up with fast-changing consumer preferences.

Experts and consumers agree that trust, authenticity, and ethical concerns are the biggest obstacles for AI influencers and despite the differing perspectives, one common feeling stands out: AI influencers will need to build credibility and relatability to succeed in the highly competitive digital marketing landscape.

6.3 Practical Applications

Beyond their potential and challenges, exploring real-world applications for AI influencers like Celeste was crucial. This section evaluates expert opinions on how AI influencers can be integrated into marketing strategies and their role in future campaigns.

7. Willingness to Use AI Influencers in Campaigns

Would you consider using an AI influencer in a future marketing campaign?

5 responses

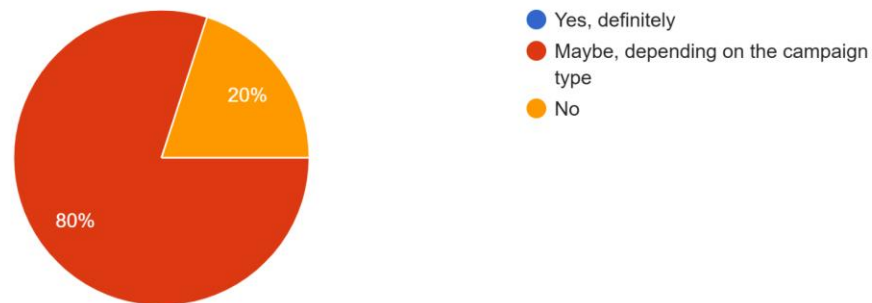


Figure 6 7 Willingness to Use AI Influencers in Campaigns

To assess whether AI influencers like Celeste have a place in real-world marketing strategies, experts were asked if they consider using an AI influencer in a marketing campaign. The majority of them (80%) responded "Maybe, depending on the campaign type", suggesting openness to AI influencers but only in specific contexts. Only one respondent answered "No". Most experts are open to using AI influencers but are not fully convinced of their universal applicability. Campaign suitability is a main factor, meaning AI influencers may work well in some industries but not others.

8. Most Effective Campaign Types for AI Influencers

In what type of marketing campaigns do you think AI influencers like Celeste would be most effective? (Select up to 2)

5 responses

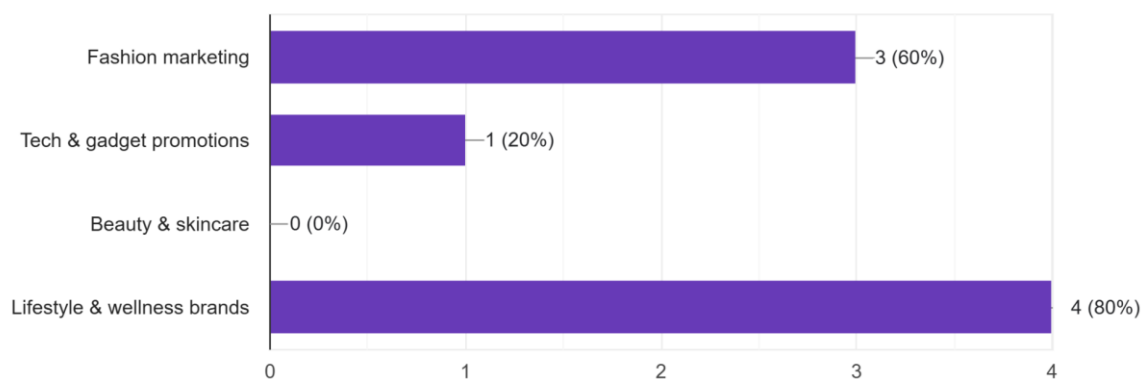


Figure 6 8 Most Effective Campaign Types for AI Influencers

To understand where AI influencers can be most impactful, experts were asked to select up to two industries in which AI influencers would be most effective:

- 4 experts (80%) selected Lifestyle & Wellness Brands, making it the most favored category.
- 3 experts (60%) selected Fashion Marketing, reinforcing that AI influencers have a strong fit in the fashion industry.
- 1 expert (20%) identified Tech & Gadget Promotions, suggesting that AI influencers may work well in technology-focused campaigns.

These insights indicate that AI influencers work best in visually driven and trend-focused industries, where digital personas can integrate into branding strategies. In contrast, industries requiring personal trust (e.g., beauty/skincare) may be more challenging.

9. Likelihood of Integrating AI Influencers

If AI influencers become more common, how likely are you to consider integrating one into your marketing strategy?

5 responses

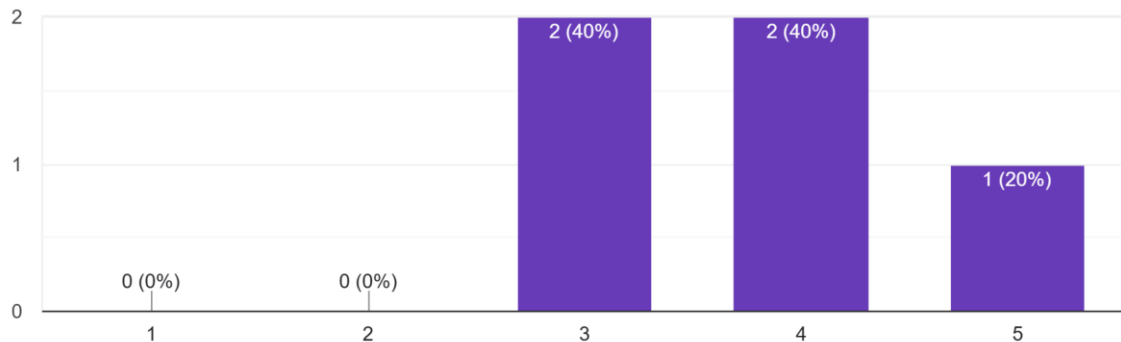


Figure 6 9 Likelihood of Integrating AI Influencers

To assess long-term adoption, experts were asked how likely it is to integrate a VI into their marketing strategy (Scale: 1 = Very Unlikely, 5 = Very Likely).

- 2 experts (40%) rated their likelihood as 3 (Neutral), showing uncertainty about AI influencers' widespread adoption.
- 2 experts (40%) rated it as 4 (Likely), indicating confidence in AI influencers becoming an established tool.
- 1 expert (20%) rated it as 5 (Very Likely), showing strong enthusiasm for AI influencer integration.

- No experts selected 1 (Very Unlikely) or 2, meaning none completely dismissed AI influencers.

Experts lean toward AI influencers being a viable marketing tool, with most responses clustered around 3 and 4.

10. The Future of AI Influencers in Marketing

How do you see the role of AI influencers like Celeste evolving in marketing?

5 responses

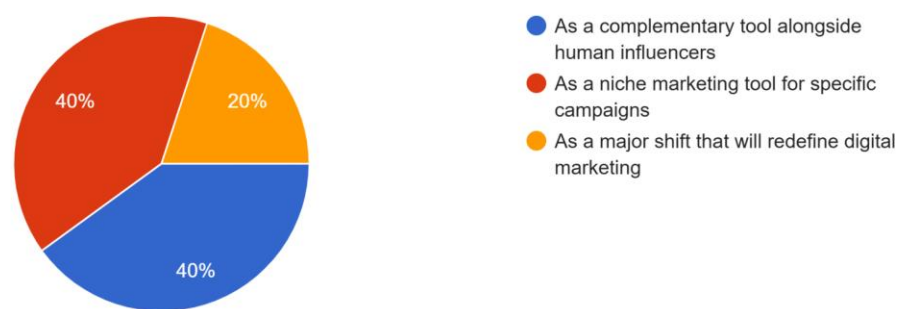


Figure 6 10 The Future of AI Influencers in Marketing

To conclude the expert analysis, the final question explored how AI influencers like Celeste are expected to evolve in the digital marketing landscape:

- 2 experts (40%) responded "As a complementary tool alongside human influencers", suggesting AI influencers will enhance, rather than replace traditional influencer marketing.
- 2 experts (40%) said "As a niche marketing tool for specific campaigns", indicating that AI influencers may remain relevant but only in targeted use cases.
- 1 expert (20%) responded "As a major shift that will redefine digital marketing", showing that AI influencers could revolutionize the industry.

The insights provided by marketing experts were valuable in assessing the potential and challenges of AI influencers like Celeste and their perspectives helped clarify their viability and areas for improvement.

Most experts are optimistic about AI influencers, seeing them as a complementary or niche tool rather than a dominant force in marketing. In contrast, consumer skepticism remains significantly higher and reveals a clear gap in awareness and acceptance. This difference

suggests that Greek consumers are not yet well-educated or exposed to virtual influencers, which could explain their reluctance to embrace this new marketing trend.

While trust, authenticity, and adaptability remain notable challenges, experts acknowledge that AI influencers offer innovation, cost-efficiency, and strategic opportunities in industries such as fashion, lifestyle, and technology. Their success will depend on how effectively they are integrated into marketing strategies and their ability to engage audiences.

7. Conclusions & Discussion

The intention of this research was to delve into the role of influencers in digital marketing, examine the advantages and risks of virtual influencers and explore the ethical issues that come with their usage. With consumer data, expert interviews and a practical case study, the study aimed to offer a comprehensive perception of influencer marketing in the fashion industry.

This chapter is focused on the evaluation of the findings, the assessment of the effectiveness of the chosen methodology and the appraisal of the tools used for the development of Celeste. Additionally, it presents the key insights documented in this research and fields for future research in this area.

7.1 Conclusions Based on the Methodology

The mixed-methods approach was effective to this research. The consumers' questionnaire gathered quantitative results on their behavior and perceptions and the "Celeste" case study provided a qualitative perspective on how AI influencers are created. Also, the Subject Matter Expert Analysis helped review AI influencers within digital marketing strategies.

The sample provided relevant insights but had some biases:

- The majority (76.2%) of respondents were women, and 72.1% were aged 25-44, which in the end is not a fully representative audience.
- The majority (76.9%) of participants had never heard of or engaged with a virtual influencer and this suggests a general lack of familiarity or impartial opinions about AI influencers.

Since AI influencers are still relatively new, consumer perceptions may evolve over time, and future studies could diversify the sample and extend analysis to more industries in order to explore long-term trends.

7.2 Conclusions Based on the Results: Consumer's Questionnaire

The Role of Influencers Marketing

Social media has reshaped marketing from traditional one-way communication to interactive, community-driven engagement. Consumers prioritize authenticity and creativity when following influencers, with everyday people being the most trusted, followed by fashion experts. Influencers operate on parasocial relationships to build up engagement, making them

a powerful promotional tool. Transparency in sponsorships significantly increases trust, as shown by the 61.22% of respondents who trust influencers more when they disclose collaborations. However, practical factors like price and product quality are the primary drivers of purchase decisions, demonstrating that influencers alone do not dictate buying behavior but work as amplifiers.

AI Influencers: Potential vs. Challenges

AI-driven influencers present new opportunities for digital marketing. The study finds limited awareness and interaction with AI influencers in the Greek audience as 76.9% of participants had never heard of or engaged with them. Subsequently trust in AI influencers remains low, with most respondents rating their credibility at the lower end of the scale. The perceived benefits of AI influencers include lower costs (cited 70 times) and innovation (cited 32 times), which align with the industry's goals for financial efficiency and creativity. The biggest concerns are consumer manipulation (76 votes), lack of authenticity (68 votes), and moral concerns (63 votes), highlighting the skepticism and ethical worries.

Ethical and Transparency Concerns

There is strong support (75.5%) for brands to disclose AI use. Consumer opinion is divided on whether AI influencers are more manipulative than the humans, 41.5% believe they manipulate more, 34.7% disagree, and 23.8% remain uncertain. With the contribution of artificial intelligence, it is hard to distinguish between reality and fiction, which can lead to ethical issues regarding a brand's trustworthiness. Lastly, despite ethical concerns, most respondents are neutral about supporting brands that prioritize ethical AI use, indicating that while transparency is valued, it is not a primary factor in purchasing decisions.

7.3 Conclusions in Developing Celeste

Celeste was developed as a practical exploration of AI influencer capabilities. Maintaining character consistency was the major challenge, requiring advanced AI tools like Kling AI and Freepik's Custom Characters.

While Kling AI was useful for generating high-quality AI images, it failed to maintain character consistency across different images. The AI-Custom-Model feature required a large dataset, making it time-consuming and resource-intensive for this project. Freepik's Custom Characters tool solved character consistency issues by training the model on eight images, ensured that

Celeste's appearance remained stable, making it more effective for long-term influencer branding.

Kling's AI Virtual Try-On feature allowed Celeste to dress in real fashion products, showing practical applications for the industry.

The use of AI-driven tools showcased how virtual influencers can be adaptable, cost-effective, and scalable, and the process also revealed some demanding stages that can be overpassed with attentive efforts.

7.4 Conclusions Based on the Results: Subject Matter Expert Analysis

The expert analysis revealed a more optimistic outlook on AI influencers compared to consumer perceptions, though with certain reservations. Experts generally recognize their potential and view them as a complementary marketing tool.

Among the primary advantages, experts highlighted innovation and cost efficiency, aligning with consumer perceptions that AI influencers can offer creative, scalable, and financially viable solutions. However, concerns about trust, authenticity, ethical considerations, and adaptability to trends remain key obstacles to widespread adoption.

While most experts acknowledge the potential of AI influencers, they remain cautious about their full integration into marketing strategies. Rather than replacing human influencers, AI-driven personas are expected to serve in specific, controlled applications, particularly in industries where visual content and brand consistency play a crucial role.

This analysis reinforces the idea that while AI influencers introduce new opportunities in digital marketing, overcoming skepticism and ensuring transparency will be essential for their long-term success.

7.5 The Future of AI Influencers in Fashion Marketing

The future of AI influencers in the fashion industry will largely depend on **consumer acceptance, ethical transparency, and strategic integration** into marketing campaigns. AI influencers still have significant ground to cover before achieving widespread adoption.

Education and increased exposure will be crucial in familiarizing consumers with AI-generated personas and demonstrating their value. As brands refine their approach, AI influencers are expected to coexist with human influencers, serving as **scalable and controlled assets** in industries that prioritize **cost efficiency, innovation, and brand consistency**.

Ultimately, **trust and ethical marketing strategies** will determine the long-term success of AI influencers. Brands must prioritize **transparency, responsible AI use, and clear disclosure practices** to establish credibility and mitigate consumer concerns. As AI-driven marketing continues to evolve, uncertainty remains the dominant consumer sentiment—while some recognize the potential of virtual influencers, many remain hesitant to engage with them.

The challenge moving forward will be to **strike a balance between technological advancement and consumer trust**, ensuring that AI influencers enhance rather than undermine the authenticity that defines effective influencer marketing.

8. Further Steps

As AI influencers continue to evolve, there are several strategic steps that should be taken to further enhance Celeste's project. While this dissertation has explored the development of Celeste and the broader implications of AI-driven influencer marketing, there are still several areas that require further attention.

The next steps focus on improving Celeste's technical capabilities, strengthening audience engagement, and contributing to the ongoing conversation on AI influencers in the industry. Enhancing her visual and vocal realism will be essential in making her presence more natural and engaging, while a well-structured social media strategy will allow her to connect with audiences more effectively. Measuring audience reception will provide valuable data for optimizing her branding, and further research will help address ethical concerns and transparency issues as AI influencers become more prevalent.

By implementing these advancements, Celeste can move beyond an experimental concept and evolve into a dynamic virtual influencer with practical applications in fashion marketing and beyond. The following sections outline the key actions that can drive this progress.



Figure 8 1 Further Steps

- Enhancing Video Quality & Realism

To increase Celeste's visual appeal and credibility, improving the quality of her AI-generated videos is essential. More lifelike movements, smoother animations, and higher-resolution will help her better integrate into social media environments. Experimenting with various AI tools can refine her expressiveness and make her interactions appear more natural.

- Upgrading Celeste's Voice

A key aspect of authenticity is vocal consistency. Future developments should focus on enhancing Celeste's AI-generated voice to sound more natural and emotionally engaging. Additionally, integrating multilingual capabilities will allow her to connect with diverse audiences while maintaining the same recognizable tone across languages.

- Bringing Celeste to Life on Social Media

Expanding Celeste's presence on social media requires a strategic content approach that aligns with fashion, sustainability, and interactive storytelling. Through a combination of curated posts, AI-generated videos, and collaborations with brands, Celeste can establish herself as a recognizable and engaging digital personality.

- Measuring Audience Reception & Engagement

Understanding how audiences respond to Celeste is crucial for her ongoing development. Analyzing follower growth, interaction rates, and audience sentiment will provide insights into which types of content are most effective. This data-driven approach will help refine branding strategies and optimize her storytelling techniques for stronger engagement.

- Expanding AI Influencer Research

The rise of AI influencers brings new ethical and social considerations. Further research should explore how trust and transparency evolve as AI-generated personalities become more common. Investigating consumer perceptions and industry trends will contribute to a better understanding of the role AI influencers in digital marketing and their long-term implications.

Final Thought: Balancing Innovation and Authenticity

This study provides valuable insights into the evolving role of influencers, both human and AI, in shaping consumer behavior. While AI influencers offer creative and cost-efficient solutions, they still face challenges in trust, authenticity, and ethical transparency. Their success will depend on how well businesses integrate them into marketing strategies while addressing consumer concerns and maintaining credibility.



Figure 8 2 Celeste in an office

Looking ahead, AI influencers are leading-edge marketing tool, when used responsibly, can enhance digital marketing strategies. As technology advances, the key to their acceptance will be striking a balance between innovation and authenticity, ensuring that AI-driven marketing remains transparent, ethical, and engaging.

Ultimately, this research serves as a starting point for further exploration, encouraging future research into the technological, ethical, and strategic dimensions of AI-driven influencer marketing. As the field evolves, understanding consumer behavior and refining AI influencer design will be essential in shaping their role in the industry.

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