

# **Testing AI's potential: Can AI-generated content increase social media engagement?**

LAB University of Applied Sciences  
Bachelor of International Business  
Bachelor's Thesis  
2024  
Nayele Vargas

## Abstract

Author(s)	Publication type	Completion year
Nayele Vargas	Thesis, UAS	2024
	Number of pages	
45		
Title of the thesis		
<b>Testing AI's potential: Can AI-generated content increase social media engagement?</b>		
Degree, Field of Study		
International Business		
Name, title and organisation of the client		
Abstract		
<p>This thesis investigates the impact of artificial intelligence (AI)-generated content on social media engagement. The work was motivated by the increasing adoption of AI tools in digital marketing and the need to understand their effectiveness compared to human-generated content. The study hypothesizes that AI-assisted content increases engagement and seeks to provide evidence supporting this claim.</p> <p>The research employed an experimental approach in which AI-generated and human-generated social media posts were compared across platforms. Engagement metrics, including likes, comments, shares, and saves, were analyzed to determine the effectiveness of the two content types. Data was collected over a defined period, with content focused on themes of cultural differences, lifestyle, and events, tailored to the interests of the target audience.</p> <p>The findings indicate that AI-generated content improves engagement rates, demonstrating its potential as a tool for optimizing social media strategies. This research concludes that AI is a valuable asset for marketers and content creators, offering efficiency and enhanced audience interaction. The results contribute to the growing field of AI-driven marketing and underscore the importance of adopting emerging technologies to remain competitive in the digital landscape.</p>		
Keywords		
Generative AI, digital content creation, engagement metrics, storytelling		

## Contents

1	Introduction.....	3
1.1	Background and context of generative AI in content creation .....	3
1.2	Thesis objectives and research questions .....	4
1.3	Limitations.....	5
1.4	Benefits .....	5
1.5	Theoretical framework.....	5
1.6	Key Concepts .....	6
2	Literature Review .....	7
2.1	Social Media Engagement and Content Strategies.....	7
2.2	Content creation .....	9
2.3	Creating content for brand curiosity .....	9
2.4	Generative AI.....	12
2.5	Human-AI interaction.....	12
2.6	Engagement metrics in social media .....	15
3	Research Methodology .....	16
3.1	Research design.....	16
3.2	Experiment.....	17
3.3	The role of AI-generated vs. human-created content.....	17
3.4	Data Collection .....	17
4	Experiment design.....	19
4.1	<b>Experiment Setup</b> .....	19
4.2	Content Creation Process .....	20
4.3	Post Themes.....	21
4.4	Content Structure .....	22
4.4.1	Human-made content.....	23
4.4.2	AI-assisted content.....	23
4.5	Content results.....	28
4.6	Data analysis .....	34
4.6.1	AI vs human-made content .....	35
4.6.2	Engagement rate trends by platform.....	36
4.6.3	Insights on AI limitations.....	37
4.6.4	Key Insights and Recommendations.....	37
5	Conclusions.....	38
5.1	Synthesis of Findings .....	39
5.2	Implications and Recommendations .....	39

5.3	Limitations and recommendations for further research .....	39
5.4	Reflections on the thesis process .....	40
	References .....	42

## 1 Introduction

### 1.1 Background and context of generative AI in content creation

The rise of artificial intelligence (AI) has revolutionized industries across the globe, from healthcare and engineering to business and marketing. In particular, AI has reshaped how marketers approach content creation, enabling them to analyze large data sets and gain insights into consumer behavior, preferences, and trends. AI technologies, such as machine learning (ML) algorithms, have enabled companies to develop more efficient marketing strategies by predicting customer needs and personalizing messages (Wong, 2023). However, while AI has the potential to optimize marketing efforts, there remains a gap in understanding how AI-generated content compares to human-created content in terms of engagement and storytelling effectiveness on social media platforms (Ming-Hui & Rust, 2021).

Social media marketing has become a critical tool for businesses, providing an interactive platform to reach large and diverse audiences (Bruhn, Schoenmueller & Schäfer, 2012). Marketers today increasingly use AI to craft personalized content that resonates with consumers, enhancing engagement metrics such as likes, shares, comments, and click-through rates (Helfrich 2022; Wong 2023). However, AI's ability to tell compelling stories, a key driver of content engagement, is still under debate (Ming-Hui & Rust 2021). Unlike traditional human-created content, shaped by creativity and personal experience, AI-generated content is driven by algorithms designed to predict consumer preferences and trends (Pradeep et al. 2018). The question remains: does AI-generated content truly match, or even surpass, human content in engaging audiences and creating narratives that resonate? (Wong 2023).

Marketers face many issues when setting a budget to obtain the best results and deliver effective content to segmented consumers in a fast-moving media environment. AI is essential to develop marketing strategies to keep up with competitors without overwhelming themselves with tons of data and fast emerging trends. AI can facilitate marketers' data gathering and analysis based on different types of consumers. However, it is important to understand which methodologies and technologies are best when working with AI. Due to the fast-learning characteristics AI has, marketing activities are driven mainly by machine learning (ML) algorithms. However, algorithms by themselves are not enough, they require human intervention to use the best AI and ML tools as well as customization of software, access databases, and other relevant information depending on the project. For instance, many successful platforms like Google are constantly creating AI algorithms that are

effective for marketing and product innovation purposes. (Pradeep et al. 2018, 24-29.). Similarly, big corporations like IKEA, Sephora, and Nike have already started using AI for marketing purposes. On the other hand, other companies are slowly incorporating AI and ML because the costs can affect either positively or negatively depending on how well the tools are used (Venkatesan & Lecinski 2021, 7).

There is a lot of competition to provide and serve customers the best way possible and with the help of AI, marketing plans can be optimized, personalized, and innovated. AI characteristics allow marketers to personalize offers, experiences, and promotions at the desired scale to reach certain segments with targeted content and relevant messages. Other types of benefits AI can bring to marketers include access to real-time analytics and insights into the audience, optimization of multi-channel campaigns by predictive analytics and machine learning, micro-segmentation technology that identifies interests and specific needs of the audience, predictions by analyzing large amounts of data accurately, real-time targeting which means that the desired message is automatically shared in the most receptive time. (Helfrich 2022; Wong 2023.).

As AI continues to evolve, its role in content creation is growing in importance. With the rise of digital marketing, AI enables the automation of content creation, real-time targeting, and the optimization of multi-channel campaigns. Social media platforms, which have become essential for brand communication and customer engagement, offer a dynamic environment for exploring AI's impact. The growing shift from traditional marketing to digital and social media channels makes it an ideal time to assess the effectiveness of AI-generated content in this space (Bruhn, Schoenmueller & Schäfer, 2012).

## 1.2 Thesis objectives and research questions

**Main research question:** How does AI-generated content impact engagement rates and storytelling effectiveness on social media platforms compared to human-created content?

**Research objective:** To analyze the effectiveness of AI-generated content in enhancing engagement rates and storytelling quality on social media platforms, compared to human-created content, and to provide insights for optimizing content strategies tailored to platform-specific preferences.

The following sub-questions will help answer the main research question and the research objective.

Question 1: How do engagement metrics differ between AI-generated and human-created content?

Question 2: What differences in engagement can be observed between AI-generated and human-created content?

Question 3: To what extent does AI improve storytelling consistency and thematic relevance?

Question 4: Can ChatGPT enhance engagement rates across different types of content on different social media platforms?

### 1.3 Limitations

According to Esch and Black (2021), AI has a revolutionizing role in creating content for campaigns, reducing customer acquisition costs, managing customer experiences, marketing the brand to prospective employees, generating leads, and converting a reachable consumer base through social media channels. There are tons of actions that AI can optimize, and to narrow the thesis scope, it will only focus on creating content for TikTok and Instagram and how it influences consumer engagement. This thesis does not involve any management tips on how content marketers or content creators can shift in a managerial way from current marketing practices to using AI as a tool, nor the costs involved in using AI in corporate management, nor any ethical matters based on AI usage. This research does not focus either on how the mechanical part of AI works.

### 1.4 Benefits

The study is beneficial for content marketers and content creators who want to utilize generative AI through accessible platforms like ChatGPT. For the author, the study gives an insightful understanding of how tools like ChatGPT can help in the content creation process based on storytelling. Understanding how generative AI tools work on social media engagement is crucial for optimizing processes, especially if the tool can bring a new perspective and facilitate this process.

### 1.5 Theoretical framework

The theoretical framework of this study is built upon three interconnected areas:

#### **1. Social Media Engagement and Content Transmission**

- Engagement on social media is influenced by users' motivations, such as emotional, self-image, social, hedonic, functional, and informational needs. These motivations shape how individuals interact with content and transmit it within their networks (Berger & Milkman 2012; Tafesse & Wien 2018).

- Various message strategies; transformational, informational, and interactional—play a key role in shaping engagement levels, with transformational content often yielding the strongest emotional impact (Puto & Wells 1984; Tafesse & Wien 2018).

## **2. Content Marketing Framework**

- The content marketing process involves strategic planning, including goal setting, audience mapping, content ideation, and distribution. These steps ensure that the content resonates with the target audience and aligns with the brand's identity (Kotler et al. 2016).

## **3. Generative AI in Content Creation**

- Generative AI tools, such as ChatGPT and others, are transforming the way marketers create and distribute content. These tools enhance efficiency, creativity, and the quality of outputs, enabling faster production of engaging content (Burn-Murdoch 2023; McKinsey & Company 2023).

### **1.6 Key Concepts**

Generative AI refers to computational techniques that can generate new types of content, such as video, text, images, or audio from training data. Some examples of these programs are Dall-E 2, GPT-4, and Copilot. These systems, besides helping with artistic and innovative purposes, can assist humans through question-answering systems. (Feuerriegel et al. 2024.).

Digital content creation is the action of generating topics into written or visual formats for a certain audience. Some of the most common ones include blogs, videos, articles, infographics, and pictures. (Hubspot 2024.).

Engagement metrics are the number of engagement actions, such as likes, comments, shares, reposts, and saves which shows if the metric is high and therefore resonating with the audience. There are different types of engagement metrics depending on the objectives of the project. (Skouby, Williams & Gyamfi, 2019, 188.).

Storytelling is an essential part of content marketing, and it demands that marketers change their brand promotion aspects into storytelling to connect with customers (Kotler et al. 2016, 121). Consumers have gotten tired of the promotions of products and services, so nowadays, they demand unique experiences, including aspects that relate to their emotions (Etzhold & Ramge 2014, 21).

## 2 Literature Review

### 2.1 Social Media Engagement and Content Strategies

Social media platforms empower consumers to express their emotions, portray their self-image, and share their experiences, which stimulates content transmission from many creators to viewers and behavioral engagement (Tafesse & Wien 2018). This type of content, in return, produces favorable affective responses, which increase engagement and content transmission. Five primary motivators influence the social transmission and engagement of a post or piece of content: emotional, self-image, social, hedonic, and functional, which reinforce positive feelings and make sense of a personal experience (Berger & Milkman 2012.), affirm and express the existence of the self, and the personality (Jahn & Kunz 2012; Wallace et al. 2014), diminish concerns, and create the belonging idea to a social group (Alexandrov et al. 2013; Kim et al. 2014), and fulfills the desire for entertainment, escape, variety and cognitive stimulation accordingly (Hamilton et al. 2016; Muntinga et al. 2011). On top of that, people will consume content on social media because of the need for information (Lovett et al. 2013). As this is the main motivator, the number of users on social media increases constantly as every type of information is available.

To develop a proper content strategy, it is important to identify the needs and motivations of the target audience on a personal and meaningful level (Tafesse & Wien 2018), in addition to using multiple social media platforms to boost reach. Once the platform is determined, there is a message category to select for the content, which is important to compel proper storytelling. There are three main types of message strategies: first, transformational, which can trigger motivation and high levels of engagement due to an individual sharing about a certain process, such as someone losing a lot of weight; second, interactional messages that transmit social connection and community identification, such as the trendy lifestyle of "That girl" which is supposed to be a person that has a rich and healthy lifestyle or even a fashion style such as "Coquette" that emphasized an old type of French style; third, informational, which provides factual details of a product or service (Puto & Wells 1984), which allows consumers to objectively the benefits, functions and applications for consumption (Laskey et al. 1989; Puto & Wells 1984). For instance, transformational content transmits a lot of value in comparison to informational interactional messages (Tafesse & Wien 2018.) and, therefore, a long-lasting memory because of the shifts in beliefs and attitudes viewers get from them (Harmeling et al. 2016, 9). However, combined brand posts that use multiple message strategies at the same time are important to have excellent brand communication on social media (Araujo et al. 2015). Figure 1 gives

a detailed understanding of the content strategy message types and how they relate to engagement.

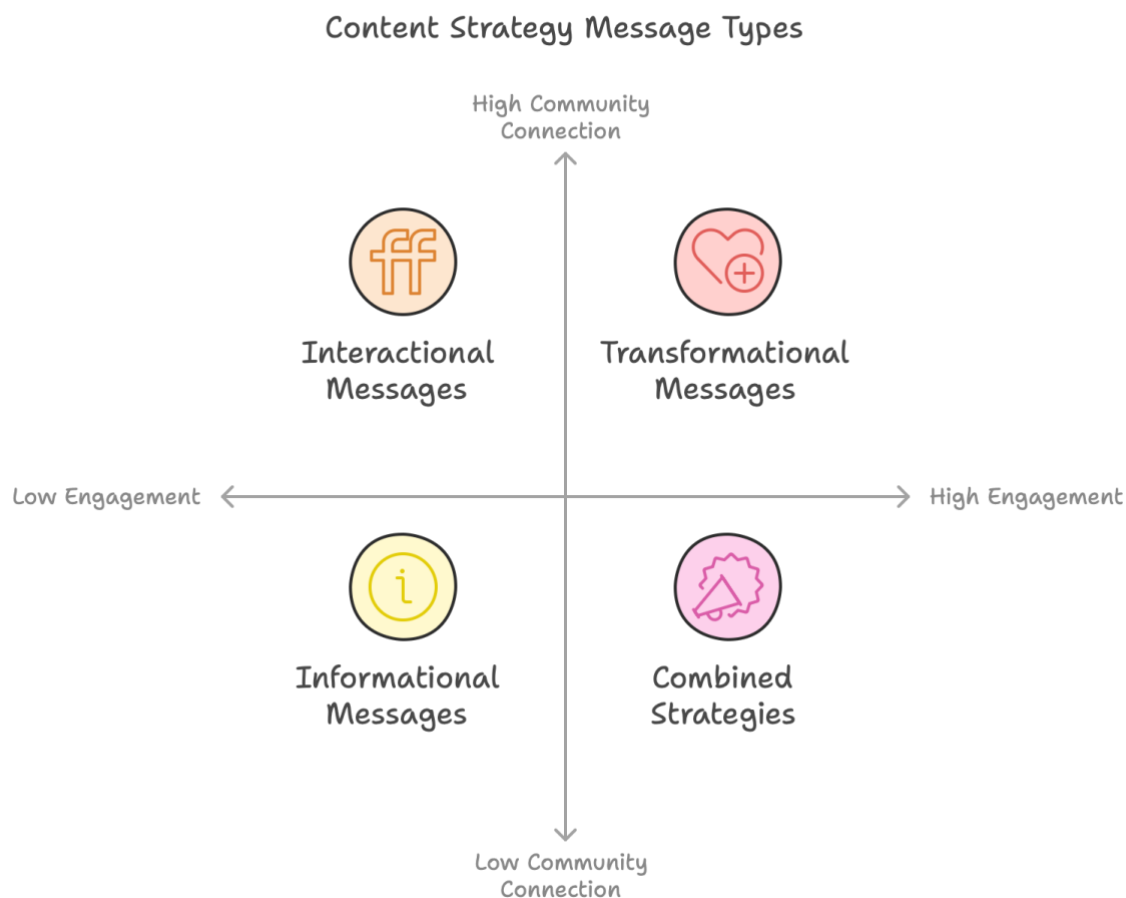


Figure 1: Content strategy and message types

Personal brand posts center around personal relationships, preferences, and experiences, encouraging consumers to express themselves based on their opinions, feelings, and anecdotes (Tafesse & Wien 2017, 15-16). In social media, this contributes to cultivating a personal level connection with viewers (Van Noort, Antheunis, & Verlegh 2014; Walrave, Poels, Antheunis, Van den Broeck & van Noort 2016). According to Tafesse and Wien (2017), 12 categories of brand posts transmit different message themes. These were identified from very well-known brands such as Tesco, Mitsubishi, Pizza Hut, GAP, and many other recognized brands internationally. The following table shows in more detail all the content categories produced for the recognized brands, which is an essential model to follow to increase engagement or communication, especially when sharing content in a storytelling way.

## 2.2 Content creation

Social media is a good way to market an individual or a business affordably and effectively (Smith 2024.). HubSpot's consumer trends report in 2024 confirms that 89% of consumers prefer to watch videos in comparison to any other type of content, especially short-form videos such as TikTok's or Instagram reels, which means no more than 60 seconds. In addition, good storytelling and production should be well thought out to correctly transmit a message to the ideal audience. Trends also influence a lot, and content creators need to keep up with them and innovate their content with new ideas (Bump 2024.).

Content creation for social media demands marketers and/or content creators to be storytellers (Kotler et al. 2016, 121). The problem that many marketers face is that they think of content creation as an advertisement and social media as another form of broadcast channels like TV or radio; however, a study conducted in 2015 by Google about YouTube views revealed that the videos that viewers do not skip contain stories, human faces, and some sorts of animations. On the contrary, adding a logo within the first five seconds reduced watch time (Kotler et al. 2016, 123-124). Social media brought a lot of change in content creation since now viewers choose when and where to consume content, including the type of content. That's why the first initial seconds are crucial in content production, as many viewers can choose to skip it if they are uninterested. For instance, user-generated content not sponsored by a brand but done by a user instead has more subscribers than branded content. (Kotler et al. 2016, 122-123.).

## 2.3 Creating content for brand curiosity

In the following sub-chapter, there is a step-by-step guide for the implementation of content marketing developed by the popular marketing author Philip Kotler, which has eight steps to help marketers with their content marketing strategy, as he mentions that it is essential to have pre-production and post-distribution activities (Kotler et al. 2016, 124-125). Figure 2 showcases the eight-step guidance.

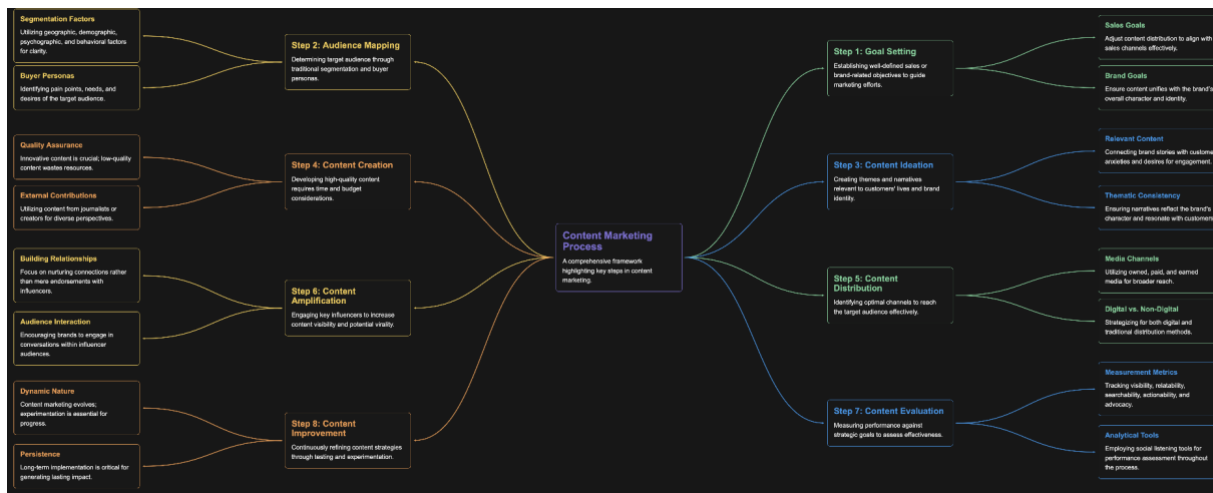


Figure 2: Step-by-step guide to content marketing (adapted from Kotler et al. 2016, 125)

The first step Kotler et al. mentioned is goal setting; this step is essential for marketers to stay on track and have well-defined goals. The author categorizes the goals into sales-related and brand-related goals. If the goals focus on sales, then the content distribution channels have to be well-adjusted to the sales channels. Whereas the focus is on the brand, the content needs to be unified to the brand's character. (Kotler et al. 2016, 125-126.).

The second step is audience mapping, which is crucial for attracting the focus of the correct audience. This determination can be done with traditional segmentation, geographic, demographic, psychographic, and behavioral factors. This is followed by setting an audience profile known as buyer personas, which helps marketers imagine their target audience in real life. Some important characteristics of the buyer personas are to identify their pain points, wishes, needs, and fears. (Kotler et al. 2016, 126-127.).

The third step is content ideation and planning. This part includes all the content that will be created. Those include the themes and narratives. Kotler et al. consider two main things, the content being of high relevance to the customers' lives, including fears and stories that reflect the brand's characters and codes. These both linked to each other will connect the brand stories to customers' anxieties and desires. (Kotler et al. 2016, 127-128.).

The fourth step is the content creation process, which is the most important step, and all previous steps lead to this. To create content that creates great success, time and budget are required. If the content is not of high quality and innovative, then the time used was a waste of time. This process is ongoing, as there is no start or end date. However, the content can also come from an external source, such as journalists, screenwriters, videomakers, etc. (Kotler et al. 129-130.).

The fifth step is content distribution, which indicates the best way to reach the target audience. This was marketers ensuring that customers see the content produced, some examples include channels like owned, paid, and earned media. And if the content will be spread through digital or non-digital channels. (Kotler et al. 2016, 130-131.).

The sixth step is content amplification, and Kotler et al. explain that not all audiences are created equally. However, the content needs to reach key influences in the intended audience group, which would likely make the content go viral. They are usually content creators who have already built a reputation over time with their content. The key point when working with them is to build relationships rather than endorse and spread branded content, that way, influencers can benefit from the branded content, while the brand can do as well, it is important as well for the brand to interact with the influencer's audience in conversations. (Kotler et al. 2016, 132.).

The seventh step is the content marketing evaluation, which involves strategic and tactical performance measurements attributed to sales or brand-related goals. Tactically, marketers should evaluate the content marketing metrics depending on the choice of formats and media channels and track the performance across the customer path with social listening and analytical tools. There are five categories of measuring whether the content is visible (aware), relatable (appeal), searchable (ask), actionable (act), and shareable (advocate). The reach and awareness metrics are impressions, such as how often the content is viewed, how many unique visitors there are, and how many viewers recall the name of the brand. Relatability is about people's interests, such metrics, include page views on the website and their actions on it. Search metrics, tell how easy the page is to get discovered through search engines. Action metrics show if the customer does any action such as click-through rate (Indicates the number of impressions based on the number of clicks) or other call-to-action the brand aims for. Lastly, advocacy indicates how much the content is being shared, these metrics include share ratio (ratio of the number of impressions with the number of shares) and engagement rate (such as comments, likes, shares, and mentions). (Kotler et al. 2016, 132-134.).

The eighth step is content marketing improvement, in this final step, it is highly accountable to track performance by content theme, format, and distribution channel. Additionally, content is very dynamic, so content marketers can easily experiment with new things, which is also essential to making decisions, such as changing the current marketing approach for a new or better one. Additionally, content marketing requires time to generate an impact, eliciting persistence and consistency in the implementation process. (Kotler et al. 2016, 134.).

## 2.4 Generative AI

With the help of Generative AI, producing texts, images, and videos can be facilitated. Especially with voice assistant features like Siri (McKinsey & Company 2023). Harvard Business School performed a study on employees of Boston Consulting Group, in which some members were able to use ChatGPT-4 for work-related tasks, showing that the employees who had access to the software performed 25% faster and improved the quality of their work by 40% (Burn-Murdoch 2023; Dell'Acqua et al. 2023), which indicates that AI improves efficiency.

As AI's efficiency has been recognized, many industries have expanded its use; however, marketing is the one with the most impact. As seen in Figure 3, the leading generative AI tools used by marketers are ChatGPT with 55%, second leading, Copy.AI with 42%, and in third leading position Jasper.AI with 36%. The most used tools for text-based and design-related tools purposes were MidJourney and DALL-E 2, which are also seen on the graphic.

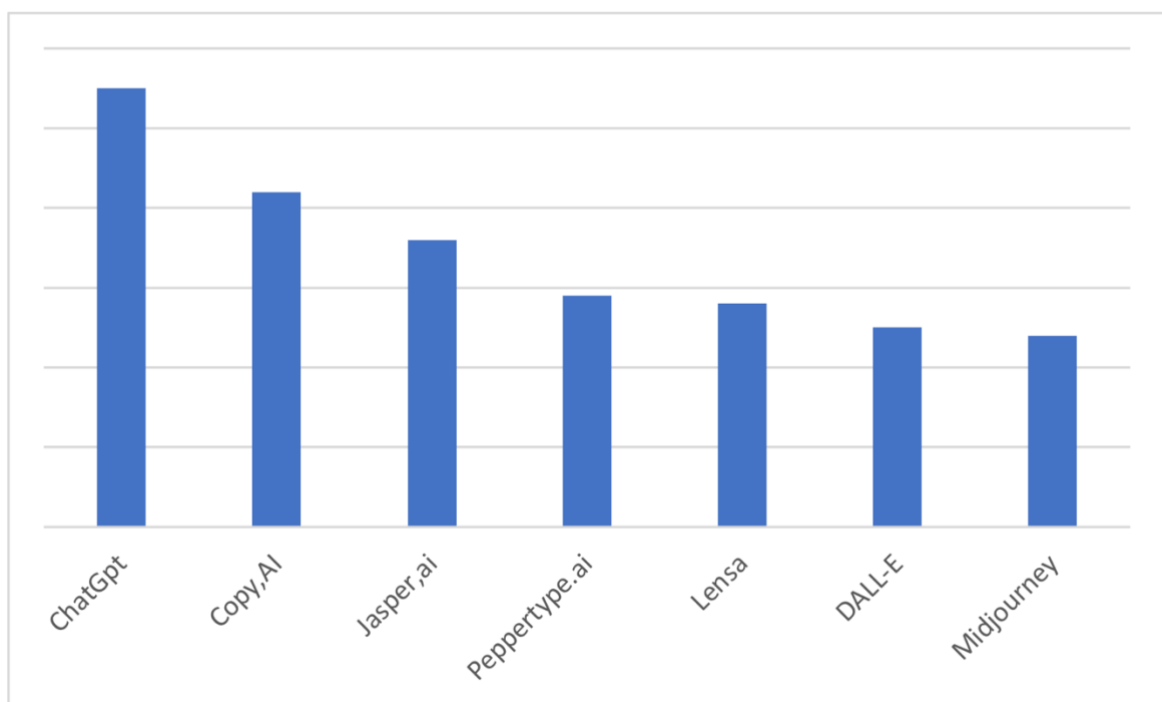


Figure 3: The most used tools by marketing professionals (adapted from Statista 2024, according to Hänninen 2024, 8)

## 2.5 Human-AI interaction

Many industries have noticed the potential of ChatGPT-3 and have used it to optimize many work-related tasks. This has built a system in which humans are constantly working with the help of AI. To succeed in this type of system, humans should be responsible for the work

tasks and use AI functions as assistance because they can provide input, feedback, and guidance for the AI system. At the same time, AI assists humans by providing linguistics, vision, and decision-making support (Fui-Hoon Nah, Zheng, Cai, Siau & Chen 2023, 283). The interaction system between the AI system and a human is a constant loop, as seen in Figure 4.

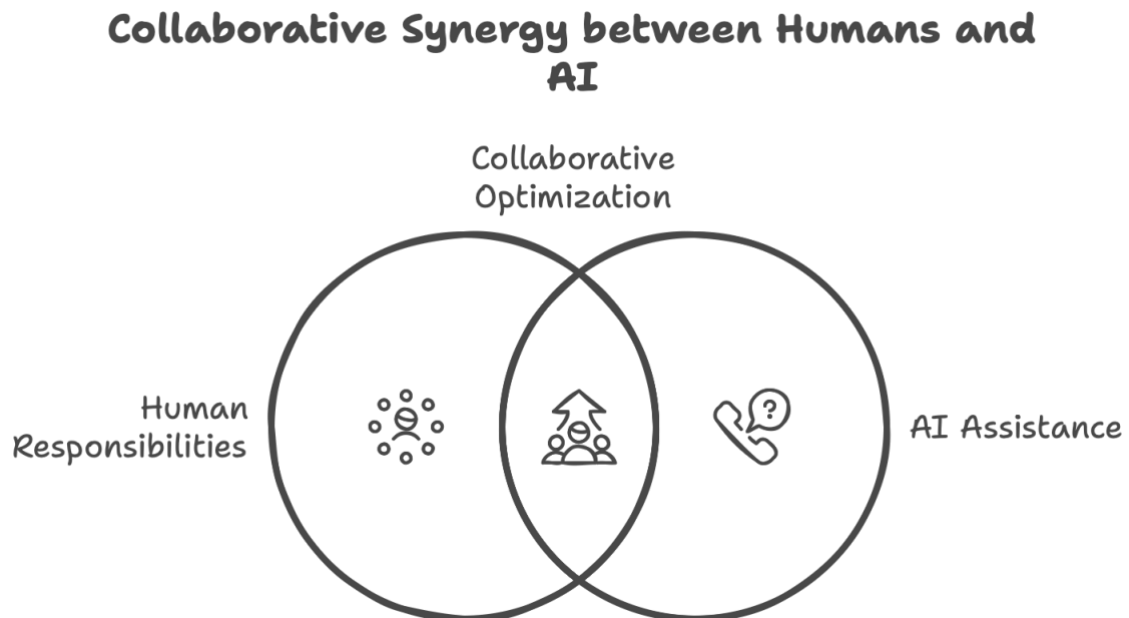


Figure 4: The interactive loop between a human and an AI system

According to Keding and Meissner (2021), there are three types of human-AI interaction. First, skeptics have more involvement in the decision-making as they do not fully trust AI-based results or recommendations. Therefore, they do not adopt AI into their processes or recommend it to others, which can lead to an efficiency issue. Second are the interactors, who have a good balance between human and AI interactions as they are open to the possibilities it can bring but, at the same time, do not fully rely on taking charge of the projects or other tasks. Third, delegators fully rely on AI to do all tasks, and they do not take too much responsibility. The delegators use AI mainly to speed up processes, which gives much more AI power for any work or project-related tasks. Figure 5 gives an overview of the type of interaction humans have with generative AI.

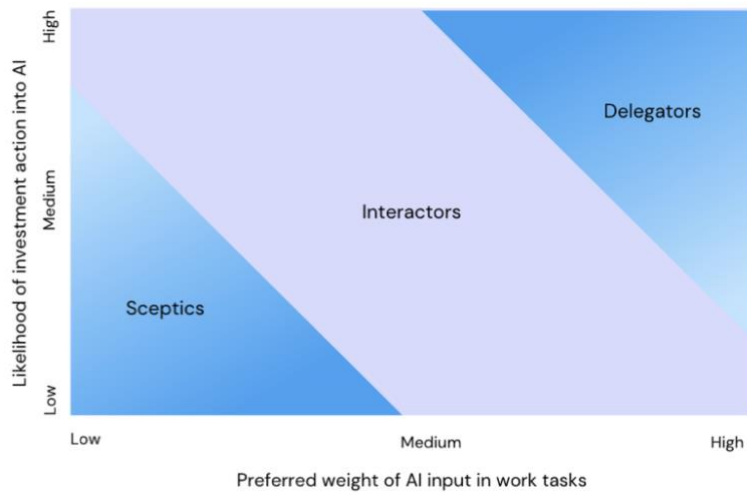


Figure 5: Types of AI based on human decision-making styles (adapted from Keding & Meissner 2021, according to Hänninen 2024, 11)

## 2.6 Engagement metrics in social media

This metric is the most important on social media because it shows how valuable the content is for the viewer to take action (Skouby, Williams & Gyamfi, 2019, 188). Engagement is the total number of people who have liked, shared, seen or commented on a post (Berger & Milkman 2012). Engagement metrics can be measured by applause rate, average engagement rate, and amplification rate as seen in Figure 6. Applause rate is the number of approval actions based on the followers, such as liking a post, this means that the post is valuable for the viewer. The average engagement rate is the number of engagement actions, such as likes, comments, shares, reposts, and saves which shows if the metric is high and therefore resonating with the audience. To prove that, all posts need to be tracked based on these metrics (Skouby, Williams & Gyamfi, 2019, 188). If this metric is high, then the actual number of likes, comments, and shares is irrelevant (Kallas 2018). The amplification rate is the ratio of how many people share the post based on the overall followers (Skouby, Williams & Gyamfi, 2019, 189). The higher this is the more willing the followers are to resonate the brand (Qualmann 2009).

### Engagement Metrics

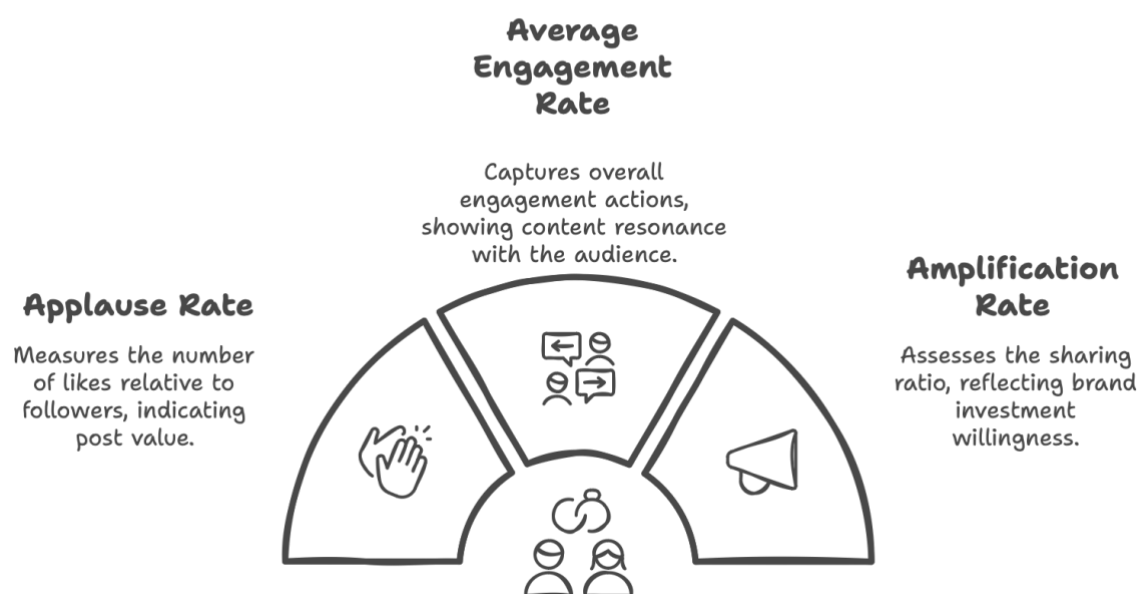


Figure 6: Types of engagement metrics

### 3 Research Methodology

#### 3.1 Research design

The research design of this thesis is descriptive since the subject aims to describe and summarize the characteristics of a particular phenomenon, in this case, the content published on social media channels like Instagram and TikTok, and how viewers react to all the content posted to obtain an accurate and comprehensive picture of trends, themes, identifying patterns of the existing situation (Saunders, Lewis & Thornhill 2015, 175). With the purpose of the descriptive research, it is possible to understand how generative AI can affect content creation in social media marketing compared to human-made content.

The research uses a quantitative approach for the data collection, and it will focus on engagement metrics that are collected from each post from the two social media platforms, Instagram and TikTok. Quantitative research examines relationships between variables in a numerical and analyzed way through structured observation (Saunders, Lewis & Thornhill 2015, 166). In this case, all numerical data from the insights of the social media channels, such as likes, comments, shares, views, engagement rate, and average watch time. This will provide insights into the performance of both AI-generated content and human-made content in terms of audience behavior. The quantitative data will be categorized in the following way:

Table 1: Quantitative research method

<b>Metric category</b>	<b>Description</b>	<b>Example Measurements</b>
Engagement	Tracks viewer interaction based on each post	Likes, comments, shares, and saves
Reach	Measures how many unique users have viewed the content	Total views
Retention	Indicates how much of the content viewers watched	Average watch time
Content Specific	Tracks metrics specific to AI-assisted vs. non-AI-assisted content performance for comparison	Engagement, reach on AI vs. non-AI

With the numerical data collected, the engagement rate per post is calculated in the following way:

$$\text{Engagement Rate} = ((\text{Likes} + \text{Comments} + \text{Shares} + \text{Saves}) / \text{Views}) \times 100$$

### 3.2 Experiment

The purpose of an experiment is to study the probability of a change in an independent variable that causes a change into another one, which is called a dependent variable. Since an experiment aims to prove a hypothesis right or wrong, there needs to be a variable that makes the experiment constant to observe and measure it. (Saunders, Lewis & Thornhill 2015, 178-179.). The purpose of this study is to understand how artificial intelligence can create branded content, which, in this case, the brand is attributed to the author, a Peruvian living in Finland, sharing her experience and her likings through storytelling to boost engagement in TikTok and Instagram.

### 3.3 The role of AI-generated vs. human-created content

The main point of this thesis is to see if AI-generated storytelling consistency, flow, and thematic relevance increase engagement in Instagram and TikTok. Since the tool used is ChatGPT, the main parts of the production used for the videos include crafting narrative structures and compelling hooks. If AI-assisted content can perform better than human content, this will be visible in the engagement metrics according to users' interactivity with the content.

### 3.4 Data Collection

The experiment design uses ChatGPT for content creation, focusing on storytelling and audience interaction, to assess the impact of AI assistance in generating content versus human content on engagement. Since the research questions and objectives involve what people do, the way to prove the hypothesis right or wrong is through observation. This involves systematic viewing, recording, describing, analyzing, and interpreting the viewer's behaviors. But, since this experiment needs internet-mediated observations, the traditional way adapts to the observation in online communities to collect data. (Saunders, Lewis, and Thornhill 2016, 354-355.).

ChatGPT assisted in generating captions, hooks, scripts, and descriptions for posting on Instagram and TikTok, ensuring each piece leveraged optimized language and engaging hooks tailored to the platforms. The role of the researcher, in this case, will be a complete observer when collecting data, which means that the viewers do not know their interactions

with the posts are being observed. This is usually tailored to consumer behavior. (Saunders, Lewis, and Thornhill 2016, 356-359.), which in this case will be seen in platform-provided metrics such as views, likes, shares, and comments when analyzing engagement. In descriptive observation, the researchers need to concentrate on observing and describing the surrounding setting, the key informants, and their activities in correlation with their emotions (Saunders, Lewis, and Thornhill 2016, 362). This approach enables the possibility of assessing audience response to AI-generated and human-created posts, providing insights into engagement levels and the resonance of AI-driven storytelling. All the data collected for the comparison is done during a two-month frame sampling period to ensure consistency.

## 4 Experiment design

### 4.1 Experiment Setup

In this experiment, the content was posted on Instagram and TikTok because they are one of Finland's most used social media channels, as seen in Figure 7, and in comparison to Facebook and YouTube, they focus more on short-form video content. These platforms are ideal for measuring the engagement impact of AI and human-generated posts. The content was primarily video-based because, according to Hilker (2017), 38, moving images refer to videos because they address the audience emotionally, especially when using storytelling (Theobald 2017, 402), but a few carousels were designed to appeal to the target audience through storytelling. Posts included short videos related to cultural themes and personal experiences with AI and human-created versions of content scripts, captions, and hashtags.

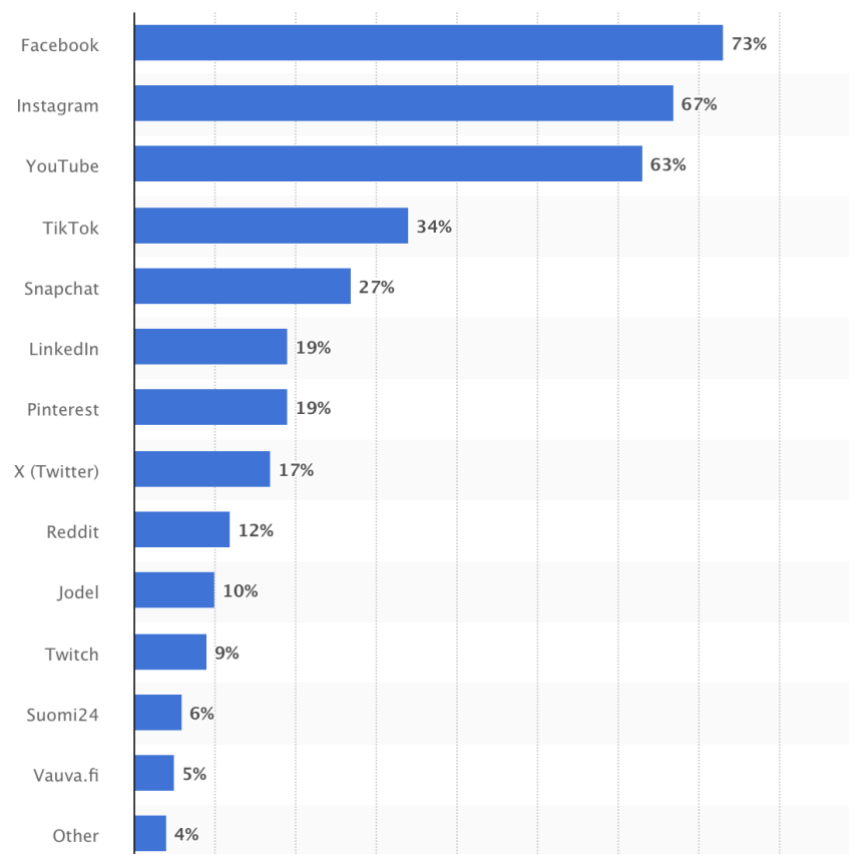


Figure 7: Most used social media channels in Finland (Statista 2024)

The experiment spanned for 9 weeks, with a total number of 27 posts, split into AI-driven and human-made content. The first ten posts were split evenly, but the following ones use AI as assistance. The reason was not to bring such a big change to the current audience since the style of posting had already changed from short-form to longer-form storytelling in

both social media accounts. Each post has a similar content structure, visuals, and varying written elements, allowing the experience of AI's impact on engagement directly. The experiment follows the content marketing model of Kotler et al. (2016), which contains eight steps, as seen in Figure 8.

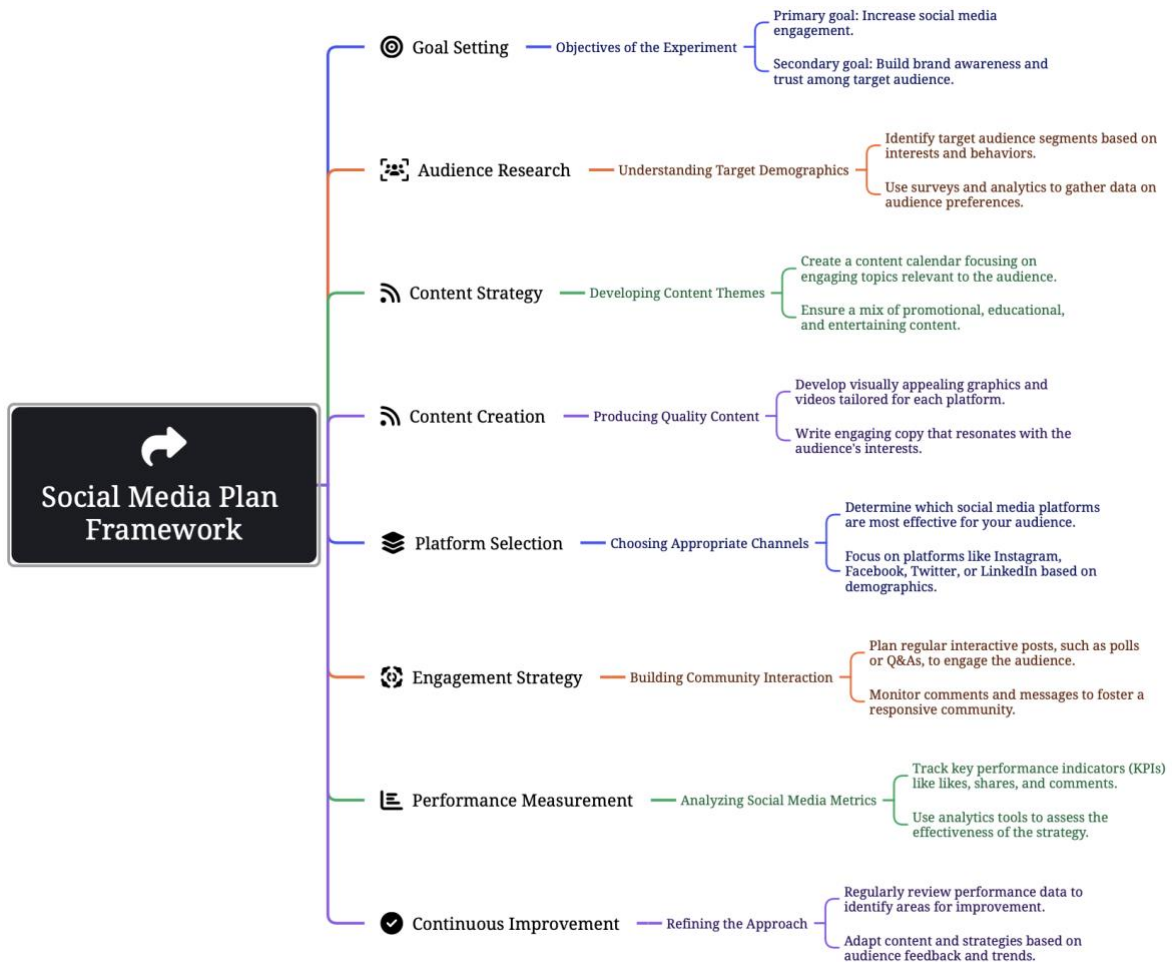


Figure 8: Content marketing model of the experiment based on Kotler et al. (2016)

## 4.2 Content Creation Process

Each post has a similar content structure, visuals, and varying written elements, allowing the experiment to compare AI's impact on engagement directly. However, there were some differences in making AI-assisted and human-made content.

Before creating any content, the AI tool must learn and understand the project's objectives. That way, any tasks and processes can be tested and improved with more information. More experimentation often enhances learning because these new approaches bring data analysis cycles, idea generation, deployment, and more analysis. It is more likely to fail these experiments in the short term, but the results will be the best anyone could have gotten in the long term. So, in these experiments, risk tolerance and longer expectations

are required. (Meerman 2022, 133-134.). Therefore, defining the goals and the target audience are important for both human and AI-assisted content. Although the period may be short, the goal is to improve every video's engagement in social media and storytelling when using artificial intelligence progressively.

### 4.3 Post Themes

After setting goals and defining the target audience, the post themes should be tailored to those. The posts of this experiment primarily focus on Finnish cultural insights and personal experiences, such as visiting unique local cafes, learning about traditional foods, or encountering Finnish traditions unexpectedly. Themes like cultural exploration and traditions, food and culinary activities, nature and outdoors activities, and crosscultural comparisons were selected as they resonate with the author's and audience's interests in cultural exploration and personal stories. Each theme connects to share a journey in Finland, creating a relatable and engaging narrative for those interested in the Finnish culture.

## 4.4 Content Structure

All content produced during the experiment follows one of the three types of content structure for the preparation of each video, with these structures, the experiment, both human and artificial intelligence content, follows a similar pattern, which makes the comparison equal. In addition, as mentioned in the literature review, the addition of messages within the content helps create relations with viewers while transmitting the brand's voice. For this experiment, there is a combination of interactional and informative messages. The interactional messages used throughout the experiment include asking questions within the video and the captions, while the informative ones transmit the Peruvian perspective and foreign aspects of living in Finland.

### 1. Hook-Story-Engagement

- **Hook:** Captivating opening lines or visuals to immediately grab the viewer's attention (e.g., surprising elements about Finland or unique cultural experiences).
- **Story:** Background information and personal anecdotes about the experience, adding a relatable and personal touch.
- **Engagement:** Calls to action, such as questions inviting viewers to comment, share their experiences, or discuss cultural differences, driving audience interaction.

### 2. Comparison Structure

- **Introduction:** Quick attention-grabbing comparison (e.g., comparing Finland with Peru or other cultures).
- **Explanation:** Describes similarities or differences, often through humor or surprise.
- **Call to Action:** Invites comments or reactions by asking if others share or understand the perspective.

### 3. Challenge/Experiment Framework

- **Challenge Introduction:** States a question or challenge upfront (e.g., testing durability, finding cultural items).
- **Journey/Process:** Shows the steps, such as testing a product or discovering something unexpected in Finland.

- **Result/Call to Action:** Reveals results with an invitation to viewers to share their opinions or experiences.

#### 4.4.1 Human-made content

The human-made content was done by the author, and her process, although similar to the AI one, the main difference is her personal point of view and thinking without external help. Table 3 showcases details of how the content was made by the author. The content description indicates what the topic of the post is and what theme is attributed to. Additionally, there are some examples of how the Author created the videos.

Table 3: Human-made content

<b>Content description</b>	<b>Main theme</b>	<b>How human effort was used</b>
Trying Korean snacks with my Finnish friend	Cross-cultural food experience	Descriptive storytelling mixing with in video reactions
How is it like working in Fashion in Finland	Cultural experience	Filmed and narrated on-site, curated captions and manually applied hashtags
The largest design event in Finland	Finnish event experience	Added a personal perspective as a peruvian to the storytelling
Trying Muikku	Food and dining experiences	Personal storytelling, editing details, and background research
Chinese tea ceremony in Finland (trying it out with a Finnish local)	Cross-cultural food experience	Researched cultural relevance, wrote script according to visuals
Prostitution number on a train in Finland	Humor and curiosity	AI helped phrase the post humorously, crafted a compelling hook, and ensured cultural sensitivity

#### 4.4.2 AI-assisted content

Artificial intelligence applications work well when they enhance what is already being done in practice. For instance, AI can not write or produce original content but can enhance an existing idea. The best way to get AI to work properly when creating content is based on two principles: a human telling it what is right and learning from the collected data or analytics. Additionally, it is necessary to have someone who understands marketing

strategy and copywriting to give a personalized and emotional touch since the AI tools are cold on their own. AI can not replace human interaction or elements, such as curiosity, emotion, intuition, creativity, and what every person has imagination. Nowadays, AI is widely used, so it is important to maintain true and honest connections with people in any marketing strategy. (Meerman 2022, 134-135, 137.). Therefore, the experiment uses the author's understanding of content marketing to use ChatGPT to create content for social media; that way, the content maintains a human touch while using the tool to improve content.

Artificial intelligence prompt engineering focuses on human language and how it can interact with an AI system by creating prompts and separate elements of texts to obtain a certain response. For example, ChatGPT has an interactive feature that enables humans to collaborate in a text-to-text conversational manner. The system will produce an effective response through prompt engineering and an exchange of communication. With this approach, users provide input prompts and refine those multiple times until they obtain the desired response. (Korzynski et al. 2023.).

In the rapidly evolving content creation and social media landscape, artificial intelligence has emerged to optimize streamlining processes and enhance creativity. The figure outlines a structured roadmap of how AI assists in various stages of the content creation journey of this experiment, from ideation to optimization. Each step highlights AI's specific contributions, demonstrating its role in crafting engaging and relevant content that resonates with the desired audience as seen in Figure 8.

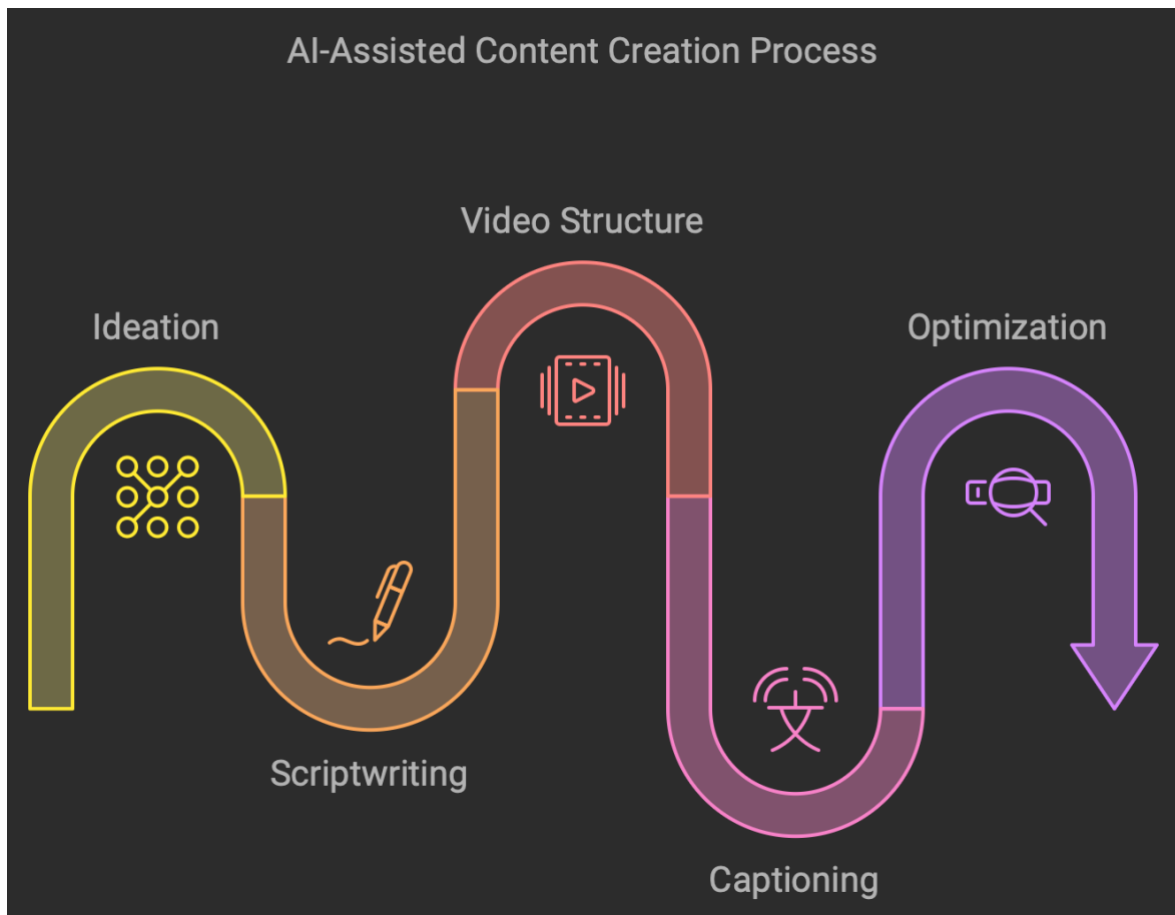


Figure 9: Content production framework with the help of AI

- **Content ideation and topics:** All information needed for the content was shared with ChatGPT, such as the content pillars, targeted audience, and experiment objectives, and for creating each topic for the posts, the B-roll's main idea was shared through the voice feature ChatGPT has, and it created themes such as cultural comparisons, travel tips, and other ideas that identify with the brand of the social media account, a Peruvian living in Finland. This way, it was possible to get relevant topics for each post that aligned with audience interests, ensuring that the content remains engaging and tailored to the correct follower base.
- **Scripting:** Once the ideas are established, AI assists in crafting concise and engaging outlines that reflect the unique tone and style of the content. The main point of generating the script with AI was to increase viewer retention, and this was mentioned before doing the script. According to Korzynzki et al. (2023), four main principles of engineering prompts are needed to create an effective prompt. First, context, which describes the role model it should adjust to, in this experiment the phrase "you are a content marketer specialized in social media and storytelling. Second is instruction, which is all the relevant information needed to perform a task.

For instance, to create the script for a specific content topic, I would write what the B-rolls I have are about, and ask it to create a script and ask for ChatGPT to do a script. Third, input data, which is the model to use to perform the task, in this case, “make the script in a way that amplifies viewer retention taking into account the targeted audience”. Fourth, the expected output format, for example, if it should be in a text form, a table, or some other type of format. In this experiment, the main format is a table as seen in Table 4.

Table 4: Example of a script made with AI

Script Line	B-Roll/Visuals	Notes
<i>"Imagine celebrating Halloween deep in the Finnish forest..."</i>	Wide shot of the Finnish forest and a cozy, lantern-lit cabin.	Set the eerie, forested atmosphere.
<i>"I'd never seen a Halloween-themed mökki before!"</i>	Close-up of Halloween decorations around the cabin: candles, cobwebs, pumpkins.	Capture the unique mökki decor.
<i>"But that's not it! Besides the cool disguises..."</i>	Shots of friends in costumes, showing off creative disguises like Black and White Swan.	Build curiosity with fun costume shots.
<i>"...I got to try food from so many countries!"</i>	Close-ups of international dishes, showing the spread of foods from different cultures on the table.	Emphasize the cultural fusion.
<i>"Wait till you see the role-play we did..."</i>	Shots of the Black Swan/White Swan dance performance, dramatic and graceful.	Build suspense with the "role-play."
<i>"And of course, we went to the sauna—because, Finland!"</i>	Clip of friends walking to the sauna at night, steam rising in the dark forest.	Connect back to Finnish traditions.
<b>Ending/CTA:</b> <i>"Would you celebrate Halloween like this? Hit follow to join the next adventure!"</i>	Group shot in costumes, laughing, and enjoying the cabin's Halloween atmosphere.	Invite viewers to engage and follow.

- Video structure and plot: In order to get the best out of the script, it needs to be paired up with the B-rolls and the voiceover. ChatGPT created a structured plan that showcases these three important parts and combines them to effectively build a narrative that maintains viewers' interest throughout the video, providing smooth transitions that keep the audience engaged until the end of the video. This structured approach enhances the storytelling aspect of the content.

- **Captioning:** For the captions, ChatGPT created an overall summary with relatable aspects to fulfill the informative and interactive messages mentioned in the literature review. The description usually has a question at the end. The author interacted with the program to get the caption that resonates the best with her tone of voice.
- **Content optimization:** AI provides valuable insights based on keywords. All content produced with the assistance of AI had hashtags, and SEO keywords used in the description to enhance discoverability. Not all the hashtags suggestions were used in the posts, as some of them were nonexistent. However, the hashtags varied depending on the social media platform since some recommendations were available on Instagram, but others were not on TikTok and vice versa.

To create the posts with AI, the first step was to share the content description and theme with ChatGPT, that way ChatGPT knew the objectives of each piece of content before creating the scripts, that way the applications varied depending on the topic. Figure 10 give and overall overview of both the basic principles before AI created the content and the methods used.

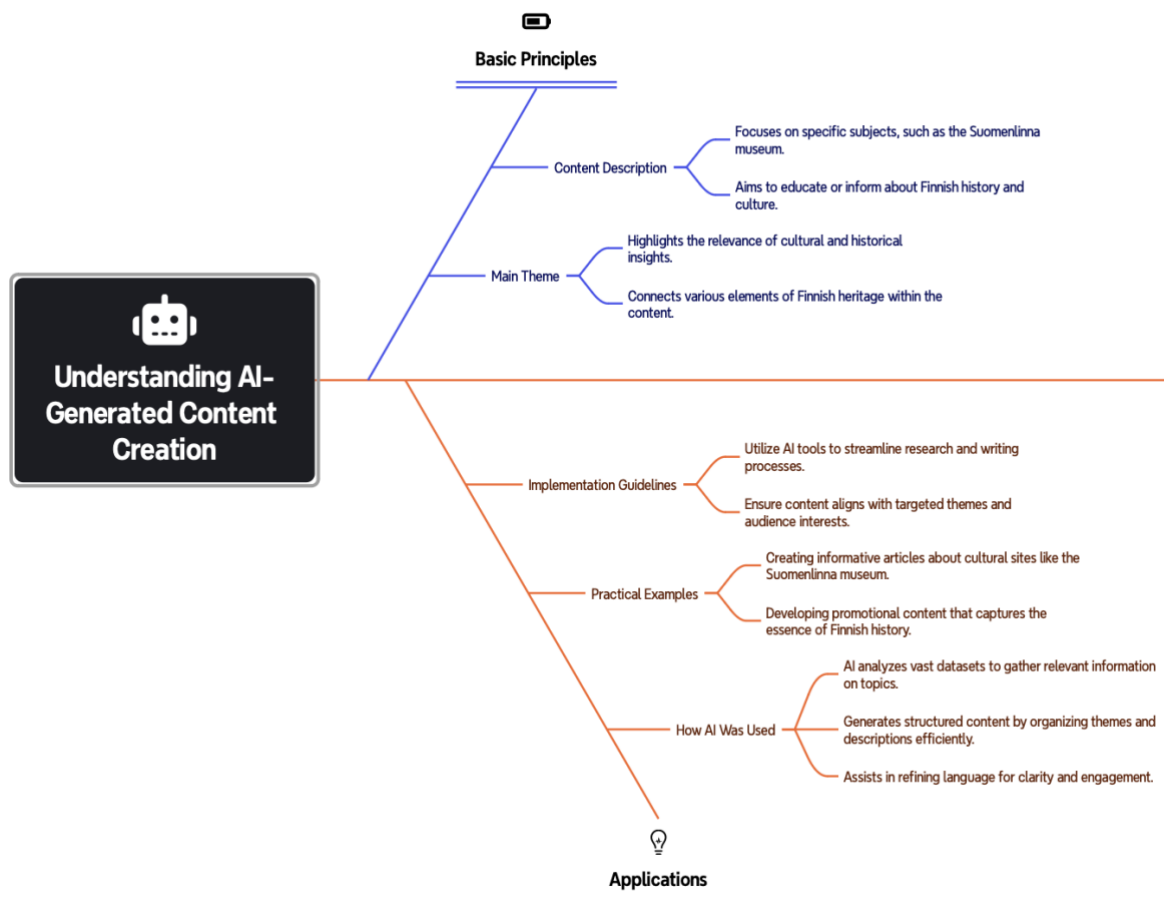


Figure 10: ChatGPT framework for creating a piece of content for social media

Figure 10 was used to create the following posts for Instagram and TikTok.

- **Suomenlinna museum:** Finnish history and cultural differences
- **Pancake & waffle day:** Finnish traditions
- **Niska pizza restaurant review:** Finnish culinary experiences
- **Helsinki cabin life for Halloween:** Seasonal Finnish lifestyle
- **Dior boots in the snow:** Fashion durability testing in Finland
- **Café experience in Lahti with a friend:** Finnish coffee culture
- **Salsa & bachata dance classes:** Cross-cultural discovery
- **Cactus fruit found in Finnish supermarket:** Peruvian-Finnish cultural crossover
- **Carousel post on luxury in Finland:** Luxury lifestyle in Finland
- **Opera experience:** Arts and culture in Finland
- **Incident on the train:** Cultural differences, personal experience
- **Experiencing a cabin in Finland:** Finnish lifestyle
- **Collecting mushrooms and cooking Finnish food:** Finnish traditions and cuisine
- **Hiking Linlo Island:** Finnish nature and hidden gems
- **Trying Siiliefilee:** Finnish cuisine
- **Peruvian food in Finland:** Cross-cultural culinary experiences
- **Why mushroom spots are a secret in Finland:** Finnish traditions and nature
- **5 Hiking traditions in Finland:** Finnish lifestyle and traditions
- **Hidden gem restaurant in Helsinki:** Dining and entertainment
- **Mistä sä oot kotosiin?:** Cultural identity and diversity
- **Halloween vs Pyhäinpäivä:** Cultural comparisons

#### 4.5 Content results

This sub-chapter showcases all the quantitative data collected from the 27 posts. The graphics are arranged from the first posted video until the latest upload, which was on a time frame of September 9<sup>th</sup> to November 11<sup>th</sup>. The comparisons are about likes, comments,

shares, and saves. The graphics with the color red represent the numerical data of Instagram, while the blue one represents TikTok.

- Likes: TikTok performed better in average liking. On the other hand, Instagram seemed to have a constant pattern, while in TikTok, the ups and downs were much more common. This can be related to how the content is shown to the audience. Instagram shows the content initially to its own followers, while TikTok shows it to new audiences. This could be another reason why, on Instagram, the posts that were more liked were human-made, as seen at the beginning of the red graphics in Figure 11. Followers care much more than non-followers which could indicate the performance of human-made content being better at the beginning of the experiment. The best-performing content on Instagram had a much more personalized touch to the author's life, such as the topic where talks about her Peruvian background (Mistä sä oot kotoisin?) and her perspective on how luxury differs from Peru and Finland. While on TikTok the most liked content was her observations and new findings in Finland such as how Finns dress at the opera and trying Siilifilee.

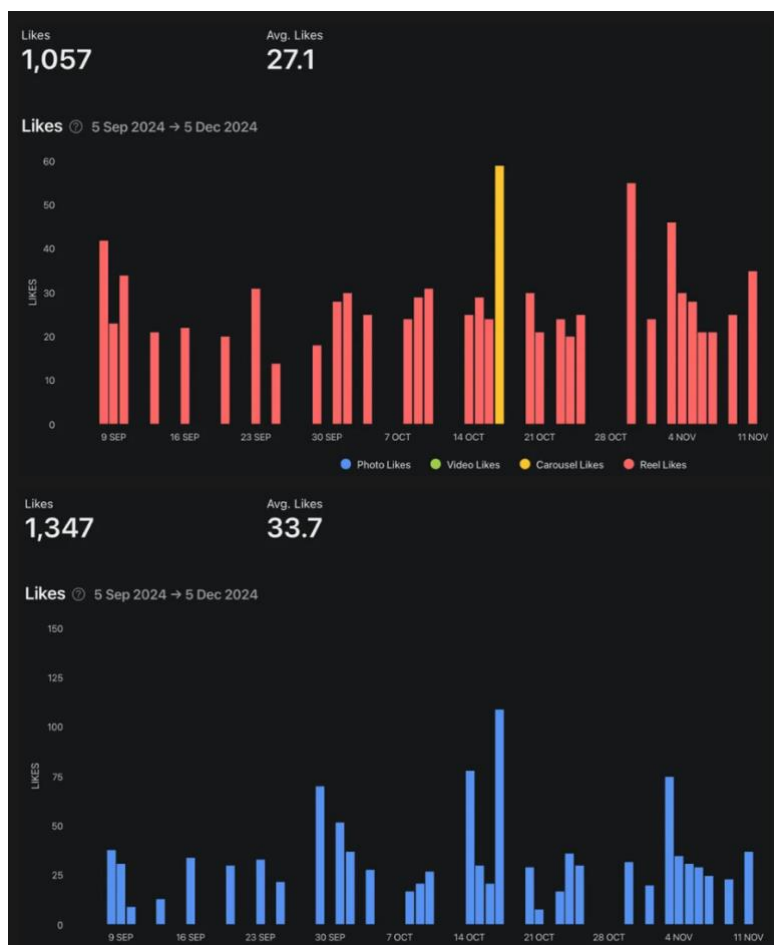


Figure 11: Comparison of likes between Instagram and TikTok

- Comments: Comments were higher on TikTok in comparison to Instagram as seen in Figure 12. This can be attributed to having more liberty on the TikTok platform since Instagram shares content that a user interacts with, either liking or commenting with his or her followers. The most commented videos were the same on both platforms: the videos about the incident on the train and trying Siilifilee, all related to the emotions and reactions of the author. Which means that both platforms work by those principles. In addition, the best performing in terms of content was the video where there was no AI interaction.

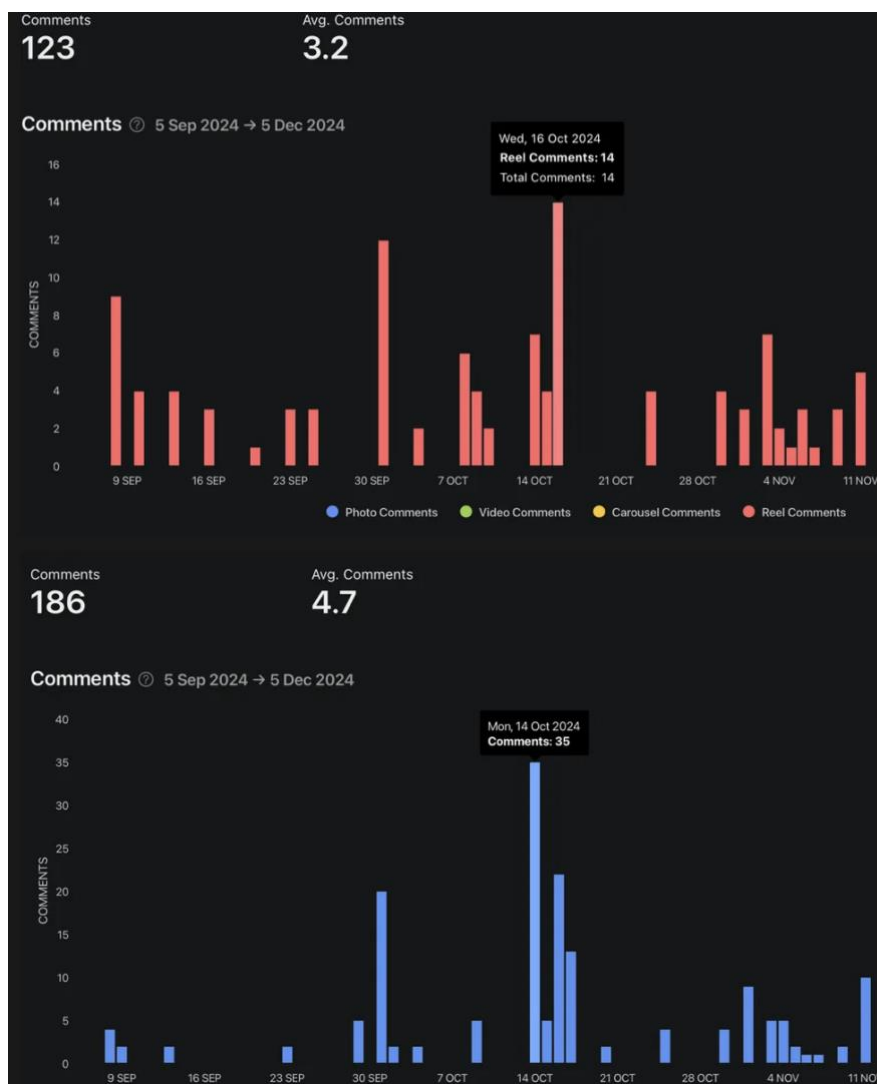


Figure 12: Comparison of comments between Instagram and TikTok

- Shares: TikTok outperformed Instagram when it comes to shares, and in both cases, all content shares were produced with AI assistance. The last one was human-made and it got the most shares on Instagram in comparison to TikTok as seen in Figure 13 on the 11<sup>th</sup> of November. In both cases, most of the shares were about places to visit and doing different activities.



Figure 13: Comparison of shares between Instagram and TikTok

- **Saves:** As seen in Figure 14, TikTok had more saves in comparison to Instagram, most of the saved content on TikTok was about places to visit on Instagram, it was quite the same, but the most saved content was hiking traditions, this could be related to the target audience based on each platform and their preferences. However, both platforms had high saves for the places to visit topic, which usually used the hook-story engagement structure as mentioned in sub-chapter 4.4 to describe new places such as the Chinese tea ceremony or the Hidden Gems restaurant video that included various dancing performances.

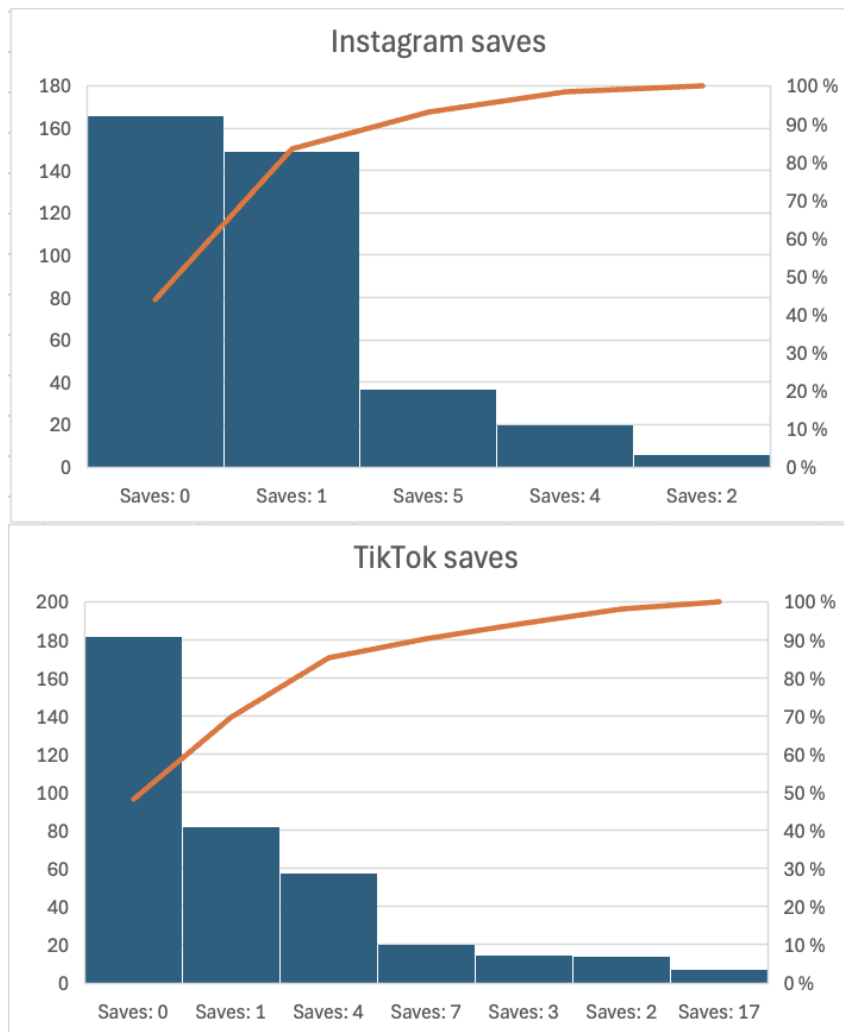


Figure 14: Comparison of saves between Instagram and TikTok

- Views: Instagram had more stable views in comparison to TikTok, which could mean that the views are based on how interesting the topic is for viewers to keep watching it. Since Instagram shows the reels first to the followers, there will be a certain interest despite the topic while on TikTok, the topic and how the content is recorded may be more influential. In both platforms, the videos with more views were recorded in a selfie way rather than having a better type of production.

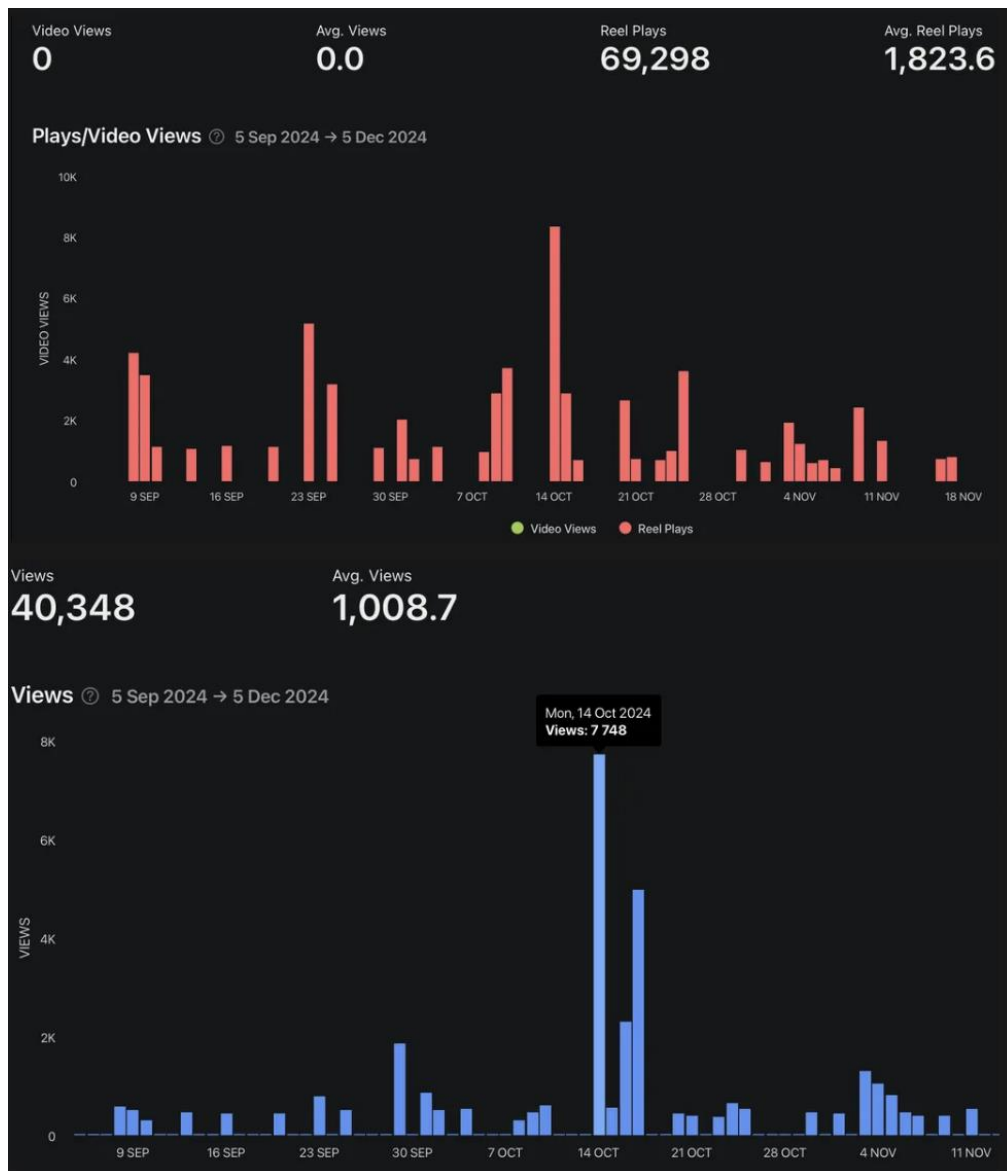


Figure 15: Comparison of views between Instagram and TikTok

- Average engagement rate: It was higher on TikTok which indicates that AI performed better in that platform in comparison to the human-made content. However, as seen in Figure 16, the post with the highest engagement rate was in the end of the experiment on TikTok which is located in the blue figure with a rate 8.56%. Interestingly, this was the only post that had a trendy song in comparison to the other posts. This means that TikTok favors trends in comparison to Instagram.



Figure 16: Average engagement rate between Instagram and TikTok

#### 4.6 Data analysis

The key findings of all the data collected showcase that the overall engagement rates were higher on TikTok than on Instagram as seen in Table 5. Especially on specific themes like cultural comparisons and themes that sparked curiosity about Finnish culture and traditions. Additionally, despite the platform in use, AI-assisted content performed better on both platforms in comparison to human-made content.

Table 5: Engagement comparison between human and AI-generated content

Platform	Best-Performing Content	Engagement Rate	Key Factors for Success
TikTok	Train incident, Siilifilee, Opera	11.25%	High watch time, trendy music, personal perspective, curiosity
Instagram	Luxury vs. Finland, Train incident (phone number), Peruvian identity (Mistä sä oot kotoisin)	5.83%	Personal branding, relatable stories, cultural comparisons

#### 4.6.1 AI vs human-made content

The posts that sparked the most comments were the same on both platforms, such as the two videos, about the incidents on the train, and the Siilifilee post. The style of recording was much simpler in comparison to other videos, in a selfie way. Although the script messages were informative, they also had a friendly tone, as the communication style was like talking to someone. This indicates that both platforms focus on the information received rather than on professionally recorded content demonstrating that relatability and authenticity are more impactful than high production quality. Additionally, there were two types of content related to the train incident, tested on both platforms, the human-made one sparked slightly higher comments in comparison to the AI-assisted content as seen in Figure 9. This means that AI has a certain limitation when creating a more conversational storyline in comparison to when a human makes it. This could be a sign that ChatGPT is not well developed to properly create conversational storylines.

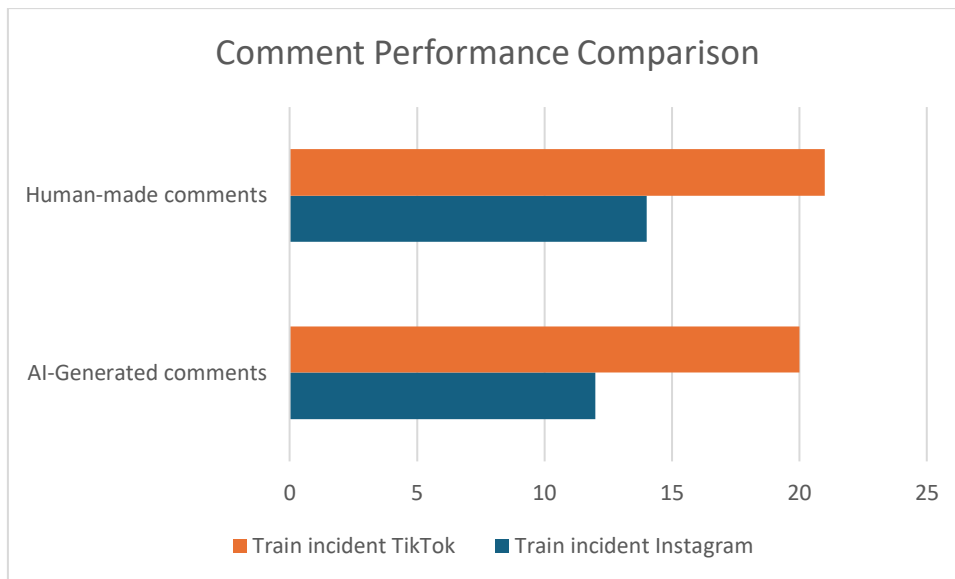


Figure 17: Content performance comparison between human-made and AI-generated content

#### 4.6.2 Engagement rate trends by platform

In Instagram, the content that performed better in terms of engagement was the posts that had more personalized topics, which means that the author shared her identity and perspective as a Peruvian. For example, the post that talks about luxury in Finland and where she comes from (*Mistä sä oot kotoisin*) has the highest number of accounts engaged, with 65 and 59, respectively, followed by other content where she tries Finnish traditions such as hiking or trying local food like “*Muikku*”. According to Forbes (2024), Instagram is a tool to create a personal brand and a loyal community. Therefore, this performance can be related to platform-specific preferences and as well how AI was able to compel a good storyline that reflects the brand’s value, in this case, attributed to the author’s brand.

In TikTok, the best-performing videos are usually attributed to having a high watch time and high engagement (Digital HEC Montreal 2024). Figure 10 shows a strong correlation between average watch time and engagement on TikTok, all the posts that had the highest watch time had the highest engagement. Besides the Incident on the train posts and trying Siilifilee, the video about the Opera had a high watch time and high engagement. This post shared a personal point of view, and in addition to that, when ChatGPT suggested a script it suggested a hook, which was changed. The first hook was quite generic and did not seem to resonate too much with the targeted audience, so the author wrote “Keep in mind the target audience”. The second hook suggestion was, “I thought going to the opera in Helsinki would mean Glamour and Elegance”, so during the text “Glamour and Elegance”, a trendy song was used that had the word “glamour”, this trendy addition could be another reason of the good performance of the post on TikTok. On the other hand, the performance on

Instagram for the same post was quite average, since as mentioned previously, Instagram focuses more on brand and community building rather than on trends.

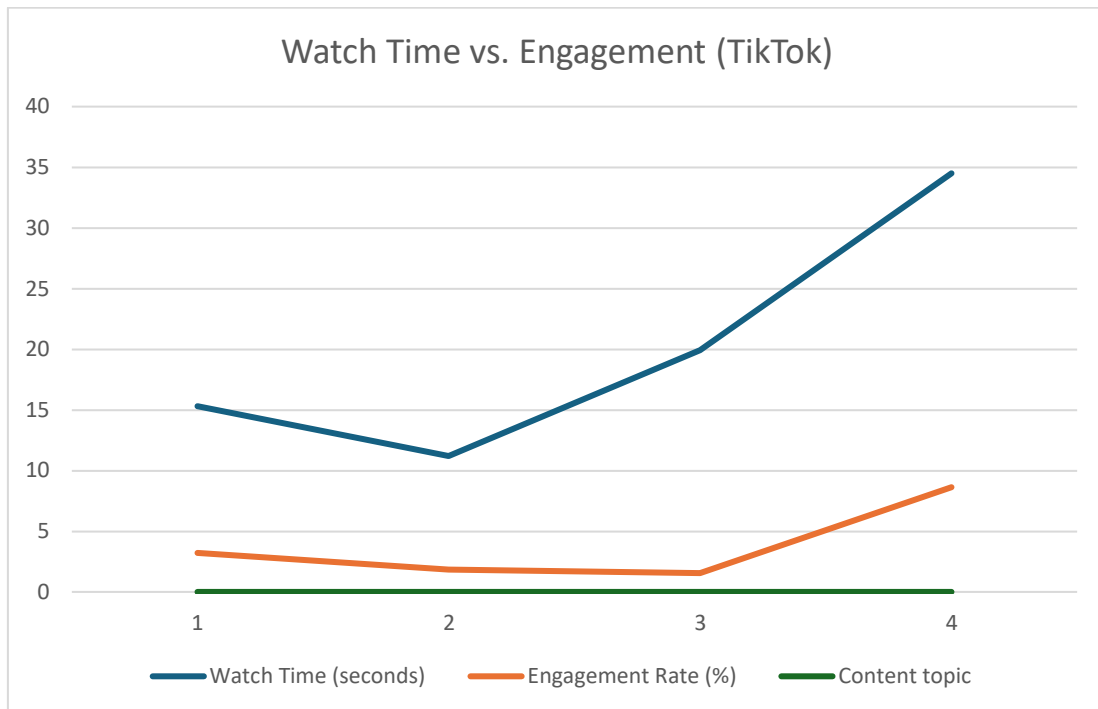


Figure 18: Correlation between watch time and engagement rate on TikTok

#### 4.6.3 Insights on AI limitations

There was not a clear increase in engagement after sharing the performance of content with ChatGPT after the initial ten posts; the engagement rate varied still quite a lot before and after. This could indicate that ChatGPT can not process large amounts of information about data analytics to understand what content performs well and the reasons. Another possibility could be that the information provided or how the information was provided (by text) is not the proper format for ChatGPT to fully understand it.

#### 4.6.4 Key Insights and Recommendations

- **AI Strengths:** Use AI for well-structured scripts, hooks, and cultural curiosity-based content, especially on TikTok.
- **Human Contribution:** Prioritize human input for conversational storytelling and relatable tone, particularly on Instagram.
- **Platform-Specific Content:** Tailor content to align with platform goals, focus on personal branding for Instagram and trendy, watch-time-optimized videos for TikTok.

## 5 Conclusions

This thesis aims to find the impact of AI-generated content on engagement rates and storytelling effectiveness on social media platforms, compared to human-created content. The study aimed to assess whether AI, specifically ChatGPT, could enhance engagement metrics, storytelling consistency, and thematic relevance, while also identifying platform-specific preferences. The findings provide valuable insights into how AI can be leveraged in content strategies.

The first question was: **“How do engagement metrics differ between AI-generated and human-created content?”**

The analysis revealed that AI-generated content consistently outperformed human-created content in terms of engagement rates across both TikTok and Instagram. TikTok showed a significantly higher overall engagement rate (11.25%) than Instagram (5.83%), particularly for posts that included cultural comparisons and sparked curiosity about Finnish traditions. Despite this, human-created content sometimes elicited slightly higher comments when the tone was conversational and relatable, as seen in the train incident posts.

The second question was: **“What differences in audience interaction can be observed between AI-generated and human-created content?”**

Audience interaction patterns varied between AI-generated and human-created content. AI-generated posts performed better in terms of watch time and engagement, especially on TikTok, where trends and hooks played a pivotal role. Conversely, human-created content excelled in fostering discussions and comments, as it often included a more personal, conversational touch. This highlights the importance of relatability and authenticity in driving deeper audience interaction.

The third question was: **“To what extent does AI improve storytelling consistency and thematic relevance?”**

AI-generated content excelled in creating well-structured scripts and maintaining thematic relevance, particularly when focusing on cultural curiosity and informational content. However, the analysis revealed limitations in AI's ability to create conversational and emotionally engaging storylines. For example, while ChatGPT was effective in generating strong hooks and scripts for TikTok, its suggestions often required manual adjustments to resonate better with the audience, as seen in the opera post.

The fourth question was: **“Can ChatGPT enhance engagement rates across various types of content on different platforms?”**

ChatGPT demonstrated its ability to enhance engagement rates across different types of content, particularly those centered on cultural curiosity and personal perspectives. However, platform-specific preferences played a significant role. On TikTok, trendy hooks, music, and high watch times were the primary drivers of engagement, whereas on Instagram, personal branding and relatable stories outperformed trend-driven content. This emphasizes the importance of tailoring content strategies to platform-specific goals.

### 5.1 Synthesis of Findings

Overall, AI-assisted content proved to be a valuable tool for increasing engagement and optimizing storytelling on social media. While AI excelled in structuring content and aligning with platform trends, human input remained crucial for creating authentic, relatable narratives that foster deeper audience connections. The results suggest that combining AI's efficiency with human creativity can yield the best outcomes.

### 5.2 Implications and Recommendations

The findings highlight the need for a hybrid approach to content creation. AI tools like ChatGPT are highly effective for generating scripts, hooks, and thematic content, particularly for platforms like TikTok that prioritize trends and watch time. However, human input is essential for conversational storytelling and personal branding, especially on Instagram. Content creators should also focus on aligning their strategies with platform-specific preferences, such as using trendy elements for TikTok and emphasizing authenticity for Instagram.

### 5.3 Limitations and recommendations for further research

This study is limited by its focus on a short-term data collection period and specific platforms. Future research could explore the long-term impact of AI-generated content, test its performance across diverse demographics, and evaluate the potential of more advanced AI tools with enhanced conversational capabilities.

The author recommends developing further research about ChatGPT and its capability to analyze data. During the experiment, there was only one trial but there was no significant improvement afterwards. This could add valuable insights for content marketers and content creators if they are utilizing social media and want to analyze large amounts of data in a budgeted way.

Additionally, this research would have provided a deeper insight of how AI assisted can contribute to the content creation process by analyzing qualitative data that could have been

obtained from the comment section and comparing the type of value-added viewers bring depending on AI-assisted content or human-made content.

There are different key metrics affecting content, and as social media is a fast-paced environment, ChatGPT could also help in the development of content. Sharing information about posts that are performing well or going viral could be shared with the platform in the form of a transcript or in a descriptive way and it can be tested out if it can replicate the same performance for another video with different topics. This can offer very deep insights into how AI can contribute to engagement based on content samples.

Generative AI is constantly improving and new platforms are continuously emerging. There are infinite ways that AI assistance could help in the content creation process, and some platforms may be better than others. Experimenting with two or more platforms in the process of content creation could give deeper insights into generative AI adaptability and human and AI cooperation.

#### 5.4 Reflections on the thesis process

The thesis process provided valuable insights into the use of generative AI in social media content creation and its impact on engagement rates. By focusing on AI tools like ChatGPT to assist in content creation, the study offered a practical understanding of how these technologies can enhance efficiency, streamline workflows, and provide creative assistance. The experiment demonstrated both the potential and limitations of AI-generated content, shedding light on its influence in building online communities and increasing engagement.

Reflecting on my performance, I found the process both challenging and rewarding. Balancing the roles of researcher and content creator required careful time management and adaptability. While I successfully designed and executed the experiment, some areas, such as analyzing engagement metrics in greater detail, could have benefited from additional refinement. This experience has improved my understanding of data analysis, content strategy, and the iterative nature of research, providing skills that will be useful in both academic and professional settings.

The reliability of the research was enhanced by using multiple content pieces across a variety of platforms to gather data. However, due to the limited timeframe and scope of the study, the sample size was relatively small, which may affect the generalizability of the findings. Despite this limitation, the data collected was consistent and indicative of trends that aligned with the research hypothesis.

Ethical considerations were an essential aspect of the research. Ensuring transparency about the use of AI tools in content creation was a priority. Viewers were not misled into thinking the content was entirely human-made, which maintains authenticity and integrity. However, the broader ethical implications of generative AI, such as concerns over originality, creativity, and potential misuse, remain a challenge. These issues underscore the importance of responsible AI usage and highlight the need for ongoing dialogue within the industry.

Overall, this research not only demonstrated the potential of generative AI in increasing engagement but also raised important questions about its role in the creative process. The insights gained through this project have been instrumental in shaping a nuanced perspective on the intersection of technology and creativity.

## References

- Alexandrov, A. Lilly, B. & Babakus, E. 2013. The effects of social media and self-motives on the intentions to share positive and negative word of mouth. *Journal of the Academy of Marketing Science*, Vol. 41, 531-546. Retrieved 26 November 2024. Available at <https://doi.org/10.1007/s11747-012-0323-4>
- Araujo, T., Neijens, P., & Vliegenthart. 2015. What motivates consumers to re-tweet Brand content? The impact of information, emotion, and traceability on pass-along behavior. *Journal of Advertising Research* Vol. 55, Iss. 3, 284-295. Retrieved 26 November 2024. Available at <http://dx.doi.org/10.2501/JAR-2015-009>
- Berger, J. & Milkman, K. 2012. What makes online content viral?. *Journal of Marketing Research*, Vol. 49, Iss. 2, 192-205. Retrieved 27 November 2024. Available at <https://doi.org/10.1509/jmr.10.0353>
- Bump, P. 2024. How Video Consumption Is Changing in 2024. Hubspot. Retrieved 19 November 2024. Available at <https://blog.hubspot.com/marketing/how-video-consumption-is-changing>
- Burn-Murdoch, J. 2023. Here's what we know about generative AI's Impact on white-collar work. *The Financial Times*. Retrieved 26 November 2024. Available at <https://www.ft.com/content/b2928076-5c52-43e9-8872-08fda2aa2fcf>
- Digital HEC Montreal. 2024. TikTok Analytics-Understanding Key Metrics. Retrieved 3 December 2024. Available at <https://digital.hec.ca/en/blog/tiktok-analytics-to-optimize-your-reach/#:~:text=For%20a%20short%2Dduration%20video,time%20combined%20with%20high%20engagement.>
- Esch, P. & Black, S. 2021. Artificial intelligence (AI): Revolutionizing Digital Marketing. Volume 29. *Australasian Marketing Journal*. Retrieved 4 June 2023. Available at <https://doi-org.ezproxy.saimia.fi/10.1177/1839334921103768>
- Etzold, V. & Ramge, T. 2016. Equity Storytelling-To tell is to sell. CreateSpace Independent Publishing Platform. Research Gate. Retrieved 3 December 2024. Available at [https://www.researchgate.net/publication/307886948\\_Equity\\_Storytelling\\_-\\_To\\_tell\\_is\\_to\\_sell](https://www.researchgate.net/publication/307886948_Equity_Storytelling_-_To_tell_is_to_sell)
- Feuerriegel, S., Hartmann, J., Jniesch, C., & Zschech, P. 2024. Generative AI. *Business & Information Systems Engineering*, 2024-02, Vol. 66(1), p.111-126. Retrieved 4 December 2024. Available at <https://doi.org/10.1007/s12599-023-00834-7>

Fui-Hoon Nah, F., Zheng, R., Cai, J, Siau & Chen, L. 2023. Generative AI and ChatGPT: Applications, challenges, and AI-human collaboration. Retrieved 25 November 2024. Available at <http://dx.doi.org/10.1080/15228053.2023.2233814>

Hamilton, M., Kaltcheva, V., & Rohm, A. 2016. Hashtags and handshakes: consumer motives and platform use in brand-consumer interactions. *Journal of Consumer Marketing*, Vol. 33, Iss. 2, 135-144. Retrieved 26 November 2024. Available at <https://doi.org/10.1108/JCM-04-2015-1398>

Harmeling, C., Moffett, M., Arnold, B., Carlson, B. 2016. Toward a theory of customer engagement marketing. *Journal of the Academy of Marketing Science* Vol. 45, Iss. 3, 312-335. Retrieved 26 November 2024. Available at <https://doi.org/10.1007/s11747-016-0509-2>

Helfrich, T. 2022. 7 Unexpected Benefits of the Role of AI in Marketing. Retrieved on 3 June 2023. Available at <https://swisscognitive.ch/2022/05/26/7-unexpected-benefits-from-the-role-of-ai-in-marketing/>

Hiker, C. 2017. Content Marketing in der Praxis. E-book. Ein Leitfaden-Strategie, Konzepte und Praxisbeispiele für B2B- und B2C-Unternehmen. Springer Gabler. Retrieved 26 November 2024.

Jahn, B. & Kunz, W. 2012. How to transform consumers into fans of your brand. *Journal of Service Management*, Vol. 23, Iss. 3, 344-361. Retrieved 26 November 2024. Available at <https://doi.org/10.1108/09564231211248444>

Kim, E., Sung, Y., Kang, H. 2014. Brand followers' Retweeting behavior on twitter: how brand relationships influence brand electronic word of mouth. *Computers in Human Behavior*, Vol. 37. Retrieved 26 November 2024. Available at <https://doi.org/10.1016/j.chb.2014.04.020>

Korzyński, P., Mazurek, G., Krzykowska, P. & Kurasinski, A. 2023. Artificial intelligence prompt engineering as a new digital competence: Analysis of generative AI technologies such as ChatGPT. *Entrepreneurial Business and Economics Review*, vol. 11, no. 3, pp. 25-37. Retrieved 26 November 2023. Available at <https://doi.org/10.15678/EBER.2023.110302>

Kotler, P., Kartajaya, H. Setiawan, I. 2016. Marketing 4.0. Moving from Traditional to Digital. John Wiley & Sons, Inc. E-book. ProQuest Ebook Central. Retrieved 19 November 2024.

Laskey, H., Day, E. & Crask, M. 1989. Typology of main message strategies for television commercials. *Journal of Advertising* Vol. 18, Iss. 1, 36-41. Retrieved 26 November 2024. Available at <https://doi.org/10.1080/00913367.1989.10673141>

Lovett, M., Peres, R. & Shachar, R. 2013. On brands and word of mouth. *Journal of Marketing Research*, Vol. 50, Iss. 4, 427-444. Retrieved 26 November 2024. Available at <https://doi.org/10.1509/jmr.11.0458>

Meerman, D. 2022. *The New Rules of Marketing and PR: How to Use Content Marketing, Podcasting, Social Media, AI, Live Video, and Newsjacking to Reach Buyers Directly*. E-book. John Wiley & Sons, Incorporated. ProQuest Ebook Central. Retrieved on 10 November 2024.

Meissner, P. & Keding, C. 2021. The Human Factor in AI-Based Decision-Making. *MIT Sloan Management Review*. Retrieved 20 November 2024. Available at <https://sloanreview.mit.edu/article/the-human-factor-in-ai-based-decision-making/>

Muntinga, D., Moorman, M., Smit, E. 2011. Introducing COBRAs: exploring motivations for Brand-related social media use. *International Journal of Advertising*, Vol. 30, Iss. 1, 13-46. Retrieved 26 November 2024. Available at <https://doi.org/10.2501/IJA-30-1-013-046>

Pradeep, A., Appel, A. & Sthanunathan, S. 2018. *AI for Marketing and Product Innovation: Powerful New Tools for Predicting Trends, Connecting with Customer, and Closing Sales*. E-book. John Wiley & Sons, Incorporated. PorQuest Ebook Central. Retrieved on 3 June 2023.

Puto, C. & Wells. 1984. Informational and transformational advertising: the differential effects of time. *Advances in Consumer Research*, Vol. 11, 638-643. Retrieved 26 November 2024. Available at [https://doi.org/10.1300/J046v12n03\\_05](https://doi.org/10.1300/J046v12n03_05)

Skouby, K. E., Williams, I., Gyamfi, A. *Handbook on ICT in Developing Countries: 5G Perspective*. River Publishers. Retrieved 29 November 2024. Available at <http://dx.doi.org/10.1201/9781003338376>

Smith, N. 2024. Should Everyone Use Social Media?. *Forbes*. Retrieved 19 November 2024. Available at <https://www.forbes.com/sites/nicolesmith/2024/04/08/should-everyone-use-social-media/>

Stahl, A. 2024. 3 Instagram Personal Branding Secrets To Use In 2024. *Forbes*. Retrieved 3 December 2024. Available at <https://www.forbes.com/sites/ashleystahl/2024/01/04/3-instagram-personal-branding-secrets-to-use-in-2024/>

Statista. 2024. Leading generative artificial intelligence (AI) tools and platforms used in marketing and advertising worldwide as of July 2023. Retrieved 20 November 2024. Available at <https://proxy.parisjc.edu:8293/statistics/1405052/gen-ai-tools-used-marketing-advertising/>

Statista. 2024. Most popular social media platform in Finland as of March 2024. Figure. Retrieved on 7 November 2024. Available at <https://www.statista.com/forecasts/1417979/finland-most-used-social-media-platform-brand>

Tafesse, W. & Wien, A. 2017. A framework for categorizing social media posts. *Cogent Business & Management*. Retrieved on 14 November 2024. Available at <https://dx.doi.org/10.2139/ssrn.2824385>

Tafesse, W. & Wien, A. 2018. Using message strategy to drive consumer behavioral engagement on social media. *The Journal of Consumer Marketing*. Retrieved on 14 November 2024. Available at <https://dx.doi.org/10.2139/ssrn.2824385>

Theobald, E. 2017. *Brand Evolution*. E-book. *Moderne Markenführung im digitalen Zeitalter*. Wiesbaden. Springer Gabler. Retrieved 26 November 2024.

Van Noort, G., Anthenius, M., & Verlegh. P. 2014. Enhancing the effects of social network site marketing campaigns: If you want consumers to like you ask them about themselves. *International Journal of Advertising*. Retrieved on 14 November 2024. Available at <https://doi.org/10.2501/IJA-33-2-235-252>

Wallace, E., Buil, I., & Chernatony, L. 2014. Consumer engagement with self-expressive brands: brand love and WOM outcomes. *Journal of Product & Brand Management*, Vol. 23, Iss. 1, 32-42. Retrieved 26 November 2024. Available at <https://doi.org/10.1108/JPBM-06-2013-0326>

Walrave, M., Poels, K., Anthenius, M., Van den Broeck, E., & van Noort, G. 2016. Like or dislike? Adolescent response to personalized social media site advertising. *Journal of Marketing Communications*. Retrieved on 14 November 2024. Available at <https://doi.org/10.1080/13527266.2016.1182938>

Walrave, M., Poels, M., Antheunis, Van de Broeck, E. & van Noort, G. 2016. Like or dislike? Adolescents' responses to personalized social network site advertising. *Journal of Marketing Communications* Vol. 22, 1-18. Retrieved 26 November 2024. Available at <http://dx.doi.org/10.1080/13527266.2016.1182938>

Wong, J. 2023. Artificial Intelligence is Revolutionizing Marketing. Here's What the Transformation Means for the Industry. Retrieved on 3 June 2024. Available at <https://entm.ag/BBy09P>

Qualmac, E. 2009. Socialnomics: how social media transforms the way we live and do business. E-book. John Wiley & Sons, New Jersey. Retrieved on 2 June 2024.