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**The Future of Marketing:
The Application of Artificial Intelligence in the Marketing Communication Process**

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I. Abstract

The integration of artificial intelligence (AI) into marketing communication processes represents a transformative shift in the industry. This thesis explores the application of AI technologies in marketing, with a focus on their potential to substitute or enhance traditional agency-driven workflows. The study investigates the extent to which AI-driven tools can optimize marketing communication by improving efficiency, reducing costs, and maintaining creative quality.

A theoretical framework establishes a foundation by defining marketing communication processes, AI technologies, and relevant strategic models. The empirical study employs a mixed-methods approach, combining a literature review and qualitative expert interviews with a case study of PUMA SE's Central European marketing operations. The research examines AI-based tools across key marketing functions, including content creation, campaign planning, and performance evaluation.

The findings reveal that AI technologies offer viable alternatives to traditional marketing communication processes, particularly in the areas of data-driven content generation and automation. However, while AI tools can enhance efficiency and streamline workflows, challenges remain regarding creativity, quality, human intuition, and strategic adaptability. The comparative analysis of AI-driven and non-AI marketing workflows highlights both the advantages and limitations of AI in real-world applications.

This research contributes to the discourse on AI's evolving role in marketing and provides strategic insights for businesses seeking to integrate AI into their communication processes. The study concludes that AI will play an increasingly significant role in marketing, yet human expertise remains essential for nuanced decision-making, creative storytelling, and brand differentiation.

Key words: Artificial Intelligence, Marketing Communication, AI Tools, Content Creation, Digital Marketing, Agency Substitution, ChatGPT, Midjourney

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III. Abbreviations

AI = Artificial Intelligence

ATL = Above The Line

BCG = Boston Consulting Group

BTL = Below The Line

BU = Business Units

CNNs = Convolutional Neural Networks

E-COM = Electronic commerce

GANs = Generative Adversarial Networks

Gen AI = Generative Artificial Intelligence

GPT = Generative Pre-trained Transformer

IN-STORE = Advertisement in stores

LSTM = Long Short-Term Memory

ML = Machine Learning

NLP = Natural Language Processing

PESTEL = Political, Environment, Social, Technological, Economical, Legal

SMART = Specific, Measurable, Accepted, Realistic, Timely

SWOT = Strength, Weaknesses, Opportunities, Threats

VAW = Variational Autoencoders

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1. Introduction

*“There are decades where nothing happens —
and weeks where decade happen.”*

– Vladimir Ilyich Lenin

In 2023, global Artificial Intelligence (AI) adoption surged from 50% to 72%, with over two-thirds of organizations in nearly every region now using AI, and half of these companies deploying it across multiple business functions, marking a dramatic increase in usage across industries (Chui et al., 2024, p.2). The rapidly evolving landscape of new technologies is transforming various industries, with AI emerging as a pivotal force in simplifying and scaling processes while creating more efficient workflows. This trend is particularly evident in the marketing sector, where AI is increasingly recognized as a game-changer. Marketers are keenly aware of AI's potential, with a growing body of evidence underscoring its adoption and impact. For instance, a significant number of companies are integrating AI into their marketing strategies to streamline operations and enhance productivity (Rao & Verweij, 2017, pp. 12-19; Deveau et al., 2023, p.6; Chui, Hazan, et al., 2023, pp. 3-5; BCG, 2024, p. 7).

The Forbes report “Content Marketing Statistics for 2024” states that this transformative potential has already been recognized by 83% of companies, which regard AI as a top priority in their future strategies, seeing it as a crucial driver for innovation and competitive advantage (Haan, 2024). Currently the application is predominantly in the planning phase of content creation rather than the implementation phase. Most existing use cases involve analytical Tools, chatbots, and text generation, with AI primarily being used to gather better user data, insights, and to target groups more efficiently, thereby enhancing user experience through improved analysis, measurements, and strategic applications (Haleem et al., 2022, pp.119-132; Murárand & Kubovics, 2023, pp. 3-5; Kumar et al., 2024, pp. 2-5).

Despite the recognition of AI's potential, the advertising landscape faces significant challenges. While advertisement budgets remain substantial and influential in shaping consumer behavior and fostering brand loyalty (Holm, 2023 pp. 63-83; Bae and Kim, 2023, pp. 2412-2430.), there is a notable decline in marketing budgets. Gartner, a leading global research and advisory company, labels it the "era of less", referring to reduced budgets, whereas it could also be called “era of more” concerning the demand for more and diverse content, which is higher than ever (Gartner, 2024). This paradox is driven by the rapid

consumption of media and the necessity for brands to maintain a strong presence across multiple channels. In 2024, marketing budgets dropped from 9.1% to 7.7% of overall company revenue, illustrating the need for marketers to achieve more with fewer resources (Gartner, 2024). Digital advertising continues to dominate, capturing a growing share of paid media spend, with key investments in search, social advertising, and digital display advertising (Gartner, 2024). This shift underscores the importance of tailored, high-quality content in driving consumer engagement and return on investment (Pallavibhoj, 2024).

The rapid pace of the media environment demands faster content creation, as marketers grapple with lower attention spans and the necessity for highly engaging content (Khanom, 2023 pp. 6-8). Managing a diverse and expanding number of channels adds another layer of complexity, highlighting the critical need for efficient and effective content strategies (Pallavibhoj, 2024). In this context, visual content, particularly images, plays a crucial role in capturing the target audience's attention and driving engagement (Messaris, 1997, pp. 9-12). While AI's initial impact was more pronounced in text-based applications, recent advances in generative AI have led to significant breakthroughs in image generation. These advancements promise to reduce time and costs associated with creating high-quality visual content, potentially transforming the landscape of content marketing (Chui, Hazan, et al., 2023, pp. 8-10).

Even if these advancements seem promising, when looking at the integration and use of AI tools in enterprises, traditional advertising agencies remain pivotal in the marketing communications and content creation landscape (Eckhardt & Arvidsson, 2015, pp. 167-171). A significant portion of content marketing activities 48 % is outsourced to agencies or third-party companies, underscoring the reliance on specialized expertise to produce professional and engaging content (Haan, 2024). This disparity can be due to various issues, such as the knowledge required to select the AI tool that can achieve the desired result more efficiently, as well as the necessary skills to handle and use the AI Tool or software. It may also be due to a lack of experience regarding the effectiveness of the tool and the quality of the output, as well as the scope of the creativity and capabilities of the AI tools (Chui et al., 2024, pp. 7-9). This reliance raises critical questions about AI's ability to replicate the creativity, intuition, and emotional intelligence of human marketers and content creators to generate the required outcome. Can AI-powered Tools truly match the nuanced and sophisticated outputs of traditional creative processes?

1.1 Objectives and research questions

The aim of this paper is to evaluate on the current state and future possibilities of using AI tools for Marketing Communication Processes. Focusing on how what kind of technologies and AI tools are available and able to support the marketing communication, or even substitute the standard process and how applicable they are for real business cases, in terms of quality, time, cost, skills and efficiency. Further on it tries to ascertain if agency work could either be completely substituted by AI tools or if there are tasks and workflows that could be simplified due to AI usage and therefore create more efficiency, by lowering cost and time. This thesis explores the transformative potential of AI in Marketing Communication Process, aiming to provide insights and recommendations for a more efficient and innovative approach to marketing. Through analysis and empirical research, it seeks to contribute to the ongoing discourse on the future of marketing and the role of AI in shaping it. Specifically, this study will address the following research question:

To what extent can AI technologies carry out the Marketing Communication Process, and how effectively can they complement or replace traditional marketing communication agencies in terms of efficiency, quality and creativity?

For answering the research questions, three hypotheses will be answered by research using scientific methods:

1. For every step of the Marketing Communication Process, at least one AI tool exist that proposes a viable alternative to conventional non-AI approaches.
2. AI tools in the Marketing Communication Process yield comparable results to those achieved without AI, indicating that AI has the potential to fully substitute agency-driven work.
3. AI-driven Tools used in the Marketing Communication Process result in higher efficiency, with reduced time and costs expenditures, compared to traditional non-AI approaches, without compromising the effectiveness or quality of the campaign.

By examining the current landscape and future possibilities, this research aims to offer a comprehensive understanding of AI's impact on Marketing Communication Processes, providing valuable insights for businesses seeking to navigate the complexities of the modern marketing environment.

1.2 Structure and organization of the work

The paper is starting with a theoretical part to introduce the topic and provide an overview of the area and important information for understanding the subsequent practical part, which is explained in the methodology. It concludes with results of the research and a discussion to present the findings and derive suggestions for use. The theoretical framework provides background on the Marketing Communication Process, including definitions, processes, and the role of agencies, as well as an overview of AI in Marketing with a focus on relevant technologies, Tools, and AI's role in visual marketing. The framework continues with an examination of sports brand marketing and the PUMA brand, which will support in understanding the Use Case in the practical part. This is followed by the derivation of the hypothesis, in the methodological section. The methods outline the research design, incorporating both quantitative and qualitative approaches to evaluate AI's effectiveness. Within the results part, findings on AI's role in the Marketing Communication Process are being presented, including a comparison between AI tools and traditional agency methods. The work is concluded with the discussion section, the assessment of the status quo within its possibilities and limitations for using and working with AI tools in content creation for marketing departments and finally an outlook for future research questions

2. Theoretical Framework

To establish a robust framework for assessing AI technologies in Marketing Communication Processes, this theoretical section will address several foundational topics. The discussion will begin with a precise definition and delimitation of marketing communication, focusing on its key processes and the various disciplines involved. This includes an exploration of how marketing communication integrates with business objectives, and the outcomes it aims to achieve. Additionally, the role of collaboration with agencies will be examined to understand its influence on enhancing marketing communication strategies.

The framework will then transition to an overview of AI, defining the concept and exploring its relevance to marketing. A detailed examination of AI technologies and Tools will follow, highlighting their capabilities and applications within the marketing. This section will also cover the use of AI prompts, which are essential for guiding these Tools in generating effective content. Further, the theoretical framework will delve into the specific application of AI in visual marketing. It will illustrate how AI technologies are utilized to create and optimize visual content, and the benefits they bring to Marketing Communication Processes.

The final segment of the framework will introduce the case study of PUMA SE Central Europe Marketing. This section will provide insights into sports goods marketing, detail the organizational structure of PUMA SE, and analyze its business units, channels, and stakeholder interactions. By incorporating these elements, the framework aims to offer a comprehensive understanding of how AI technologies can enhance Marketing Communication Processes in a specific environment, setting the stage for an empirical investigation into their practical applications and impact.

2.1 Marketing Communication Process

The Marketing Communication Process is a crucial component of any organization's overall marketing strategy. It encompasses all activities involved in conveying messages to the target audience with the intention of influencing their behavior. Understanding this process is vital for leveraging marketing practices. The subtopics discussed in this section, including the definition and delimitation of marketing communication, the various processes involved, and the outcomes of effective marketing communication, provide a foundational understanding that will inform the subsequent exploration of AI's role in enhancing these processes. By defining and distinguishing key concepts, analyzing the steps involved in marketing communication, and examining the expected outcomes, this section sets the stage for a deeper investigation into how AI can revolutionize marketing communication strategies.

2.1.1 Definition and delimitation

Marketing communication is a broad concept that encompasses all the messages and media used to communicate with a market. The term "Marketing Communication Process" refers specifically to the sequence of steps involved in crafting, delivering, and receiving messages that convey a value proposition to the target audience. Various definitions exist in the literature, reflecting the diverse approaches to and understandings of this concept (Pluta-Olearnik, 2018, pp. 124-125; Mickleit & Forthmann, 2023, pp. 27-30).

The term "marketing" encompasses interpretations, broadly classified into a narrower business-oriented perspective and a broader, more generic understanding. The narrower perspective of marketing focuses on the market-oriented activities of a company aimed at satisfying market needs and achieving its own objectives. This view of marketing emphasizes the activities directly related to the selling process, such as product development, pricing, distribution, and promotion. The goal here is to create a value exchange that benefits both the company and its customers (Berndt et al., 2016; Tropp, 2019, pp. 55-60; Meffert et al., 2024, pp. 599-620). In contrast, a broader, more generic understanding of marketing views it as a social technique employed to manage societal and interpersonal processes. For instance, marketing principles can be applied to non-commercial institutions, public causes, or even personal branding, as seen in various societal contexts beyond traditional commerce. Philip Kotler, describes Marketing in a broader context, not only meaning advertising and selling, but as a customer-focused concept aimed at satisfying needs (Kotler *et al.*, 2022, p. 40). This definition highlights the fundamental role of marketing in facilitating exchanges that meet human needs, whether these exchanges occur in a business setting or any other social context.

The shift from traditional transaction-based marketing to relationship marketing marks a significant evolution in the field. Relationship marketing, which focuses on building, maintaining, and enhancing relationships with customers and other stakeholders, is seen as a source of competitive advantage. This shift, often described as a "paradigm change" in marketing, underscores the importance of sustained interactions and long-term relationships over one-time transactions (Bruhn, 2018, pp. 22-25). In summary, marketing communication can be defined as a can be defined both narrowly and broadly, depending on the focus. In general, it can be seen as a mediation of meaning within the company, from the company

to the environment and within the environment with which market and customer relationship-oriented corporate management is realized (Tropp, 2019, pp.22-25).

Schulz (2009) describes communication between people as a "connection for the transmission of messages" (p. 169). Communication can be explained as the transfer of information content between sender and receiver. Just like the pure transmission of information, the sharing of information counts as communication. Here information can be communicated verbally, using language, but also non-verbally through gestures and communicated through gestures and glances (Scheufele, 2022, pp. 89-123). Communication is a complex construct that is based on a communication goal and can be perceived and initiated in various forms. Tropp (2019, pp. 11-13) explains that selectivity in communication is important in order to reduce complexity and to perceive something as information. Context is also crucial to establish connections and recognize a clear meaning. The last important point in communication is reflexivity, by considering thoughts, intentions, and behaviors in its context, which is important so that the communication offer has the same meaning and a common ground is formed that is understood by both sender and receiver (Krippendorff, 1998, pp. 8-11).

The communication of a company's goods or service began around the 1960s, after supply outgrew demand. Since then, communication has been subject to constant change and has developed into a challenge due to the ever-increasing supply, an overload of information, competition, and misinformation. Because with today's mass of advertising messages, it is important that the recipients are not overwhelmed by the flood of advertising or even feel disturbed (Bruhn, 2018, pp. 10-14). Behind every marketing communication lies a strategy, meaning a guideline with a specific communication objective that uses communication Tools and measures to show how a service or product can be communicated to a specific target group, to achieve the defined objective. According to Bruhn (2018, pp. 30-35), marketing communication involves all measures a company uses to convey its value propositions to its audience, aiming to influence their purchasing behavior. Kochhan and Moutchnik (2018, pp. 120-124) further refine this by describing marketing communication as a structured solution path that articulates how communication goals are achieved through the impactful delivery of content to stakeholders.

This thesis adopts a comprehensive definition of marketing communication as the strategic management of all communication activities aimed at engaging target audiences and fostering desired responses, which aligns with the broader perspective that encompasses both traditional and digital channels.

2.1.2 Strategy, Tools and Models

Every goal requires a specific course of action. The word "strategy" has its roots in Greek, where it is understood as "the science of military leadership for the preparation, planning, and execution of campaigns" (Ruisinger, 2020, p. 151). A strategy outlines a future goal, establishes the direction to be taken, and serves as the foundation for action. It is important to note that both goals and interim objectives should always be measurable, and all planning should account for external circumstances and available resources. Kochhan and Moutchnik (2018) define strategy as follows: "A strategy describes a structured approach to a solution. It formulates the mechanics with which the communication goals are achieved, the stakeholders are addressed, and the communication content is transported effectively based on the defined positioning" (p. 130).

There is a variety of different models and strategies for achieving the set goal. A corporate communication processes can be divided into the three phases: formulation, realization, and final implementation (Zerfaß & Volk, 2019 pp. 30-35; Ruisinger, 2020, pp. 51-55; Mickleit & Forthmann, 2023, pp. 50-55). Where there is also a four-stage development by Cutlip and Center, that is divided into: analysis, strategy, implementation, and control (Cutlip et al., 2006, pp. 238-244), or as in Merten's conceptual model in the five key stages: analysis, strategy, tactics, implementation, and control (Merten, 2013, pp. 45-52). Other communication strategy models like the phase model for planning integrated communication by Fuchs & Unger (2014, pp. 21) and the digital communication strategy by Ruisinger (2020, pp. 206-213.) are described in more than 6 steps, whereby they base stays the same as in the other examples, but they unravel steps in subareas.

Fundamentally, it can be concluded that a process can generally be divided into four key stages: analysis, planning, implementation, and evaluation. This forms the basis of the process, which is purposefully expanded by incorporating appropriate methods and Tools to achieve specific objectives. For the present work, the process flow, that is shown in table 1 is created based on the examples and processes mentioned. This flow will be further expanded by integrating established models, methods and Tools of marketing communication into each of the process steps. The model starts with an Analysis of the status quo and continues with Strategic and Operational Planning, that is key to define the objectives and the target group and to plan the marketing communication based on it. The

next phase includes the implementation and realization of the planning, which effectiveness will be monitored and evaluated in the last step.

Overview of the Marketing Communication Process

Step	Description
1. Situational and Market Analysis	Analyze the current communication landscape, market trends, and competitors.
2. Strategic Planning	Identify strategic target groups for communication and define persona profiles. Define strategic communication objectives and strategic positioning that communicates the brand's unique value proposition.
2. Operational Planning	Plan the content strategy for delivering key messages to the target audience and set message pillars. Break down the goals into actionable steps and allocate the necessary resources for execution.
4. Implementation	Create content and execute the communication plan, ensuring all messages, content, and campaigns are delivered across the relevant channels.
5. Monitoring and Evaluation	Continuously evaluate the effectiveness of communication efforts using KPIs and ROI.

Table 1: Own representation: The Marketing Communication Strategy Process. Based on Fuchs & Unger (2014, pp. 56-60) and Ruisinger (2020, pp. 206-213)

These models are designed for long-term strategic applications, guided by a central objective and following a cyclical process that allows for continual refinement through ongoing evaluation and adjustments. The iterative nature of the process enables the strategy to adapt to changing conditions, ensuring alignment with the desired goals (Bruhn, 2018, pp. 65-70; Meffert et al., 2024, pp. 599-620).

To outperform those strategies and achieve specific communication objectives, marketing communication involves a variety of Tools, methods, and instruments as listed in Figure 1. Tools are indispensable in communication management as they establish a common framework that enhances efficiency and rationality in collaboration. They simplify complex

issues, support decision-making, and strengthen the legitimacy of proposed solutions. However, Tools must be carefully selected and applied thoughtfully to avoid disrupting existing processes. A well-structured toolbox provides a systematic framework that facilitates the documentation, training, and improvement of communication processes, contributing to clear and effective communication within the organization (Zerfaß & Volk, 2019, pp. 25-26; Hohenauer, 2023, pp. 31-34).

Toolbox for Communication Management



Figure 1: Own representation: Toolbox for Communication Management. Based on Fuchs & Unger (2014, pp. 20-26); Wesselmann & Hohn (2017, pp. 23-24) and Zerfaß & Volk (2019, pp. 25-26)

There are several Tools that can be chosen, as shown in the Toolbox. To examine which Tool fits best, it is important to be sure what outcome and what data shall be derived by the Tool. The communication mix refers to the specific combination of communication Tools a company uses to achieve its goals. This mix results from complex decision-making processes and reflects the company's strategic direction. It includes a range of instruments, from traditional media to digital platforms and innovative communication methods (Fuchs & Unger, 2014, pp. 65-68; Pluta-Olearnik, 2018, pp. 130-132).

The analysis phase is the foundation of any communication strategy, as it involves a comprehensive assessment of the internal and external communication environment. This phase seeks to understand the organization's current communication strengths and weaknesses, identify key stakeholders, and analyze relevant external influences such as market trends and competitor activities (Zerfaß & Volk, 2019, pp. 25-26). Once a thorough analysis has been conducted, the next phase involves strategic planning, in which communication objectives, key messages, and action plans are formulated. The purpose of this phase is to ensure that all communication activities align with the broader organizational goals and stakeholder expectations. The implementation phase is where strategic plans are translated into concrete communication actions. This includes content creation, message dissemination, stakeholder engagement, and media management. Successful implementation requires well-organized execution across multiple channels, ensuring that messages reach the intended audiences effectively (Fuchs & Unger, 2014, pp. 20-26). Evaluation is a critical component of communication management, as it provides quantifiable insights into the effectiveness of communication strategies. This phase involves measuring key performance indicators (KPIs), assessing audience engagement, and analyzing feedback to determine whether communication objectives have been met.

Communication strategies must be continuously refined to maintain their effectiveness in dynamic environments. The optimization phase focuses on learning from evaluation results and making data-driven adjustments to enhance future communication efforts. This phase emphasizes agility, ensuring that communication remains relevant and responsive to emerging trends and audience needs (Wesselmann & Hohn, 2017, p. 23-24). The Marketing Communication Process that is used as a base for this work is shown by the following table 2. It provides an overview in which the appropriate Tools are assigned to the respective Marketing Communication Process steps.

Overview of the Marketing Communication Process and its Tools

Step	Description	Tools
1. Situational and Market Analysis	Analyze the current communication landscape, market trends, and competitors.	Porter's Five Forces
		SWOT Analysis
		PESTEL Analyses
		Competitor Analysis
		Stakeholder Analysis
2. Strategic Planning	Identify strategic target groups for communication and define persona profiles. Define strategic communication objectives and strategic positioning that communicates the brand's unique value proposition.	Trend Analysis
		SMART Objectives
		KPIs
		Persona
		Customer Journey
		Core Brand Values
		Positioning Map
2. Operational Planning	Plan the content strategy for delivering key messages to the target audience and set message pillars. Break down the goals into actionable steps and allocate the necessary resources for execution.	Vision and Mission
		Content Plan
		Content Marketing Matrix
		Resource Allocation Matrix
		Production Plan
		Budget Plan
		Gantt Charts
		AIDA
4. Implementation	Create content and execute the communication plan, ensuring all messages, content, and campaigns are delivered across the relevant channels.	Editorial Calendar
		Production
		Omnichannel Marketing Platforms
		CRM Tools
		Adobe Creative Cloud
5. Monitoring and Evaluation	Continuously evaluate the effectiveness of communication efforts using KPIs and ROI.	Campaign Management Tools
		Social Media Analytics
		Google Analytics
		Sentiment Analysis Tools
		Heatmaps
		Dashboard Tools
		A/B Testing Tools
KPIs		

Table 2: Overview of the Marketing Communication Process and its Tools. Based on Bjerke & Renger (2016, pp. 45-50); Grunert (2019, pp. 120-145); Tropp (2019, pp. 30-60); Ruisinger (2020, pp. 206-220); Seebacher (2022, pp. 60-75)

The process integrates the five steps mentioned above: Situational and Marketing Analysis, Strategic Planning, Operational Planning, Implementation and Monitoring and Evaluation. Starting the process with a Situational and Marketing Analysis, that involves analyzing the current communication landscape, identifying market trends, competitor strategies, and

potential challenges. It serves as the foundation for informed decision-making in marketing communications, using Tools like Porter's five Forces, or the SWOT Analysis, which stands for, Strength, Weaknesses, Opportunities and Threats, analyses the is-situation in the market. (Wesselmann & Hohn, 2017, pp. 24-25). To evaluate a firm's environment, products, and services, the PESTEL analysis shows the Political, Environment, Social, Technological, Economical, and Legal factors. When wanting to have a clear overview of the target group, a Persona Analysis helps by displaying a pattern of action and by giving a description of a particular group of people (Zerfaß & Volk, 2019, pp. 30-35). To compare or rethinking business segments or methods, the Boston Consulting Group (BCG) matrix provides insight into a relationship between two dimensions visualized in four fields, in order to create a (new) strategy (Zerfaß & Volk, 2019, pp. 40-45; Meffert et al., 2024, pp. 599-620).

In the second phase of planning, several Tools are employed to refine and guide the communication strategy. Strategic Planning includes defining measurable objectives using the SMART (Specific, Measurable, Accepted, Realistic, Timely) framework, ensuring clear, actionable goals. Identifying target audiences, guided by persona analysis and creating a customer journey, which enables tailored messaging. Creating Vision and Mission Statements and Core Brand Values as a base of the brand communication and setting KPIs to evaluate the success of an organization (Bjerke & Renger, 2016; Seebacher, 2022). The brand steering wheel helps in defining and aligning a brand's identity by outlining key elements such as brand values, core competencies, personality, and tonality. This ensures that all aspects of brand communication are consistent and cohesive (Tropp, 2019, pp. 22-25). Another important tool, the positioning matrix, is used to map the brand's position relative to competitors in the market. This matrix aids in identifying unique attributes and market gaps, enabling the brand to strategically position itself to appeal to its target audience. Additionally, topic planning is crucial for the strategic scheduling and management of content themes over a specific period, ensuring consistent and relevant messaging across all communication channels (Fuchs & Unger, 2014, pp. 56-60; Zerfaß & Volk, 2019, pp. 48-50).

Operational Planning follows, supported by a comprehensive content strategy, that is developed using Tools like a Content Plan, Content Marketing Matrix or a production plan and the AIDA model as a framework, to guide message creation for diverse platforms and drive conversion. It allocates resources and defines timelines with Tools like Gantt charts,

Budget Plans, Resource Allocation Matrix and Editorial Calendars ensuring efficient execution (Grunert, 2019; Tropp, 2019).

During implementation, project management platforms, such as Omnichannel Marketing, CRM Tools and Campaign Management Tools streamline tasks and scheduling to ensure a unified approach to delivering campaigns across multiple channels. Briefings are also crucial at this stage, providing team members or external partners with detailed instructions and information to ensure alignment with the strategic goals and clarity of roles (Meffert et al., 2024, pp. 705-710). A production is the outperformance of the previously planned campaigns and goals, supported by the Creative Cloud to for pre-production, to deliver the set visuals and creative materials.

Finally, the process ends with evaluation using KPIs, Google Analytics, Social Media Analytics and sentiment analysis, to assess campaign effectiveness, ensuring alignment with the defined communication objectives. Dashboard Tools, Heatmaps to visualize the analyzed data and monitor it and A/B Testing for comparing marketing assets to to embark on improvements (Grunert, 2019; Ruisinger, 2020).

2.1.3 Outcomes and goals

The Marketing Communication Process describes the sequence of a strategy through which measures and materials are implemented and communicated internally or externally, thus leading to the defined goal of the process. The implementation is the operative part and the output of the strategy. There are a variety of possibilities as to what the product can look like and for which area it is used. The marketing mix, which was created by E. Jerome McCarthy in 1960 and has been used as the basis for marketing ever since, provides an overview (Meffert et al., 2024, p. 6). The 4 Ps describe product, price, place and promotion, which can be explained by Marketing works when the “right” product is sold at the right time in the right place at the right price (Wesselmann & Hohn, 2017, pp. 21-23). This product must be marketed through targeted communication in such a way that the end consumer becomes aware of the product, his interest is aroused, he would like to have it and then makes the purchase of the product (Bruhn, 2018, pp. 50-55).

A critical aspect of marketing communication, in addition to strategic planning, is the operational component. This phase becomes relevant once the analysis, goal setting, and strategy formulation have been completed. To achieve effective marketing communication, it is essential to select the appropriate marketing Tools that will effectively convey the advantages of a product or service to the target audience. It is important to consider which instruments provide the most benefits and how the budget should be allocated among these selected Tools (Todorova, 2015, pp. 369-372).

The selection process begins with a clear understanding of the communication objectives, which guide the choice of the most suitable instruments to achieve the desired outcomes. Communication Tools can be broadly categorized into traditional and digital advertising. Traditional advertising includes methods such as print media, while digital advertising is further divided into online, social media, and mobile categories. Online advertising Tools, for example, include search engine marketing, email marketing, and blog posts; social media Tools encompass shorts and reels on platforms like Instagram, Facebook, and YouTube. Mobile communication Tools involve service apps and push notifications. Following the selection of these instruments, specific media channels, such as Instagram, a magazine, or a Spotify podcast, are chosen. The planning and scheduling of these media placements are detailed in the media planning process (Meffert et al., 2024, pp. 700-720).

There is a large number of different channels that can be used to communicate the product or service, like in the format of Text, Images, Video, Audio and Community Portals as shown in Table 3.

Overview of the Marketing Communication Channels

Text	Images	Video	Audio	Community
E-mail	Photos	Image film	Podcasts	FAQ
Newsletter	Graphics	Tutorials	Music	Voting/Polls
Blog posts	Product images	Webinars	Audiobooks	Forums
SMS	Infographics	Live streams	Voice messages	Social media groups
Articles	Memes	Product demonstrations	Radio broadcasts	Comment sections
Whitepapers	Illustrations	Interviews	Soundbites	User-generated content
Press releases	Banners/Ads	Vlogs	Audio ads	Reviews and ratings
Brochures	Screenshots	Testimonials	Jingles	Wikis/knowledge bases

Table 3: Overview of Marketing Communication Channels. Based on Ruisinger (2016, p. 199-203); Wesselmann and Hohn (2017, p. 60-85); Zerfaß and Volk (2019, p. 35-50) and Meffert et al. (2024, p. 705-730).

When wanting to use and display those channels for communication, tailored content is needed. Encompassing the process of generating material that offers value, relevance, and engagement to a targeted audience is a cornerstone of contemporary marketing, named content creation. This process includes the conceptualization, production, and distribution of various forms of media. The primary goal of content creation is to establish a meaningful connection between the brand and its audience. Unlike traditional advertising, which often focuses solely on promotional messages, content creation aims to deliver utility-driven content that fosters deeper engagement and communication (Zerfaß & Volk, 2019, pp. 30-35).

The various forms of media hold several components such as informative articles, blog posts, videos, infographics, and social media updates, all designed to meet audience needs and establish the brand's authority. Textual content, including articles and product descriptions, aims to educate and assist in purchasing decisions (Kochhan and Moutchnik,

2018, pp. 155-162). Visual content, like images and infographics, captures attention and conveys information effectively. Video and audio content, such as tutorials, webinars, podcasts, and interviews, engage audiences and build brand trust (Adobe Experience Cloud Team, 2023).

The strategic goal of content creation is to build long-lasting consumer relationships through consistent and valuable content, informed by a deep understanding of the target audience (ICMF Survey, 2021, pp. 3-5; Borst, 2017, pp. 55-60). Evaluating content performance through KPIs like website traffic and social media engagement is essential for refining content marketing strategies (Grunert, 2019, pp. 35-40). By leveraging different forms of content, brands can effectively communicate with their audiences, build lasting relationships, and establish themselves as authorities in their respective industries (Portal et al., 2018, pp. 714-717)..

2.1.4 Collaboration with Agencies

When it comes to planning and implementation of the Marketing Communication Process, parts or the whole project can be outsourced to an agency (Tropp, 2019, pp. 56-60). In principle, an agency can be regarded as a company that represents the interests of other companies or individuals by providing services on behalf of and for the account of third parties. They are used by companies because of their expertise, efficiency, or objectivity. A distinction can also be made between consulting companies and communications agencies. Consultancies are responsible for strategy and conception, while communications agencies are primarily responsible for implementation (Fuchs & Unger, 2014, pp. 65-68; Tropp, 2019, pp. 48-52). The necessity of involving external specialists stems from the fact that internal marketing and communications departments often do not possess the same level of specialized knowledge and creative abilities. Agencies can deliver fresh, unbiased insights and develop innovative approaches that might not emerge from internal teams (Fuchs & Unger, 2014, pp. 70-75)

The marketing communication landscape offers a diverse range of agencies, each specializing in distinct areas to cater to the varied needs of businesses. Advertising agencies, for instance, focus on creating, planning, and placing advertisements across various media platforms, acting as intermediaries between clients and the media to deliver impactful campaigns (Todorova, 2015, p. 369). Creative agencies, on the other hand, emphasize originality and innovation, crafting brand narratives and visual designs that resonate emotionally with target audiences (Zerfaß et al., 2022, p. 393). Media agencies specialize in planning and purchasing media space, using data analytics and programmatic tools to ensure that advertisements reach the right audience effectively (Pluta-Olearnik, 2018, p. 123). Similarly, public relations (PR) agencies manage a company's reputation and stakeholder relationships through activities such as crafting press releases, organizing events, and managing crisis communication (Zerfaß et al., 2022, p. 839). The digital age has given rise to social media and digital marketing agencies, which focus on creating and managing campaigns on digital platforms. These agencies excel in audience engagement, content marketing, and leveraging influencers to maximize impact (Ivanova & Gawenda, 2021, pp. 75-77). For businesses looking for a comprehensive solution, full-service agencies integrate strategy, execution, and performance analysis across multiple channels (Zerfaß et al., 2022, p. 743). Boutique or hot store agencies, in contrast, are smaller and more specialized, often excelling in niche industries or delivering highly creative solutions (Zerfaß

et al., 2022, p. 745). Promotion agencies focus on direct customer engagement, crafting strategies for sales promotions and events to enhance customer interaction and drive sales (Todorova, 2015, p. 369).

Collaboration between agencies and companies begins with strategic alignment. Agencies take the time to understand a company's objectives, target audience, brand values, and market positioning. Full-service agencies, for example, integrate communication efforts across channels to ensure consistency and effectiveness (Pluta-Olearnik, 2018, p. 122). A good collaboration with an agency can work by setting clear rules that help avoid conflicts and expectations around scope, deadlines, and budget. Clear communication, structured interactions and trust help to build a partnership, which helps to ensure a successful long-term collaboration. This can shorten agreement processes and ensure high-quality output, as long as both parties fulfill the expectations discussed and invest in the collaboration (Nöcker, 2014). Creative development is a cornerstone of this partnership, where agencies and companies work together to develop compelling concepts that align with the client's branding and campaign goals. This involves brainstorming, content creation, and design tailored to resonate with the intended audience (Zerfaß et al., 2022, p. 393). However, several challenges can arise in the collaboration between agencies and companies. Whereby unclear or inadequate formulation of the briefings can cause issues. If requirements are not communicated accurately, the agency's deliverables may not align with the company's expectations (Fuchs & Unger, 2014, pp. 70-73). The evaluation of creative work is another critical area where challenges can occur. As Bruhn (2018, p. 60-65) highlights, disagreements often arise over the criteria for assessing creative performance. Without well-defined and agreed-upon evaluation metrics, subjective opinions can lead to conflicts between the agency and the client. Moreover, agencies may propose ideas and strategies that, while creative, might not fully align with the firm's established objectives or corporate culture. This misalignment can create friction and resistance, complicating the implementation of agency recommendations.

The work of the agency can be described in three phases. The first step is planning. Here, the agency receives a detailed briefing from the client, which describes the desired end product. If desired, the agency can also influence this and incorporate its feedback (Fuchs & Unger, 2014, pp. 70-75). In the second phase, which is the implementation phase, the agency creates a concept or design which is presented to the client and discussed with

them. If the client wishes to make changes, there are feedback rounds in which the agency can make adjustments to achieve the desired end product (Fuchs & Unger, 2014, pp. 75-80). The third and final phase involves checking and submission. Once approval has been obtained, production and execution or mailing can begin (Fuchs & Unger, 2014, pp. 80-85). In summary, marketing and communications agencies are essential partners for companies seeking specialized and creative solutions for their communication strategies. The selection of an appropriate agency and the establishment of an effective collaborative process are crucial for successful marketing initiatives. Agencies offer not only creative services but also strategic consulting based on extensive experience across various industries. To enhance collaboration, it is vital to ensure clear briefings, regularly review and adjust the partnership, and foster a long-term, trustful relationship.

2.3 AI in Marketing

In a time when new methods and workflows are being sought to make processes more efficient and save time in operations, the topic of AI is increasingly coming to the forefront. The digital age is characterized by rapid change, aptly captured by the quote from Vladimir Ilyich Lenin, "There are decades where nothing happens — and weeks where decades happen." AI reflects this very dynamic and opens up numerous opportunities to rethink traditional practices and test innovative approaches (Basha, 2023, pp. 994-996). In marketing, the potential of AI is particularly evident: it promises to be a powerful and future-oriented technology that not only streamlines marketing communication processes but also makes them faster and more cost-effective. AI can optimize complex workflows, personalize content, and develop data-driven strategies in real-time. Its implementation in marketing practice has the potential to fundamentally transform the industry and set new benchmarks (Ljepava, 2022, pp. 1309-1310). Artificial Intelligence is increasingly becoming an indispensable tool that helps businesses respond to the demands of a dynamic market and secure competitive advantages (Labib, 2024, pp. 2-4; Basha, 2023, pp. 997-998).

The advent of generative AI platforms, such as OpenAI's ChatGPT, has revolutionized content generation in marketing. Launched in November 2022, ChatGPT and similar Tools enable marketing teams to produce a wide array of content efficiently, including blogs, marketing messages, copywriting materials, emails, and website copy (Rivas and Zhao, 2023, pp. 375-377). This capability substantially decreases the time and resources needed for content creation, enabling marketers to allocate greater attention to strategic planning and creative development (Flinders, 2023). Content personalization has also emerged as a leading application of AI in marketing. According to a Deloitte study of Mittal et al. (2024), 53% of marketing leaders utilize AI for content personalization, while 49% leverage it for content creation. The primary focus areas include blogs (65%), website content (62%), and social media (55%). By tailoring content to individual preferences, businesses can enhance customer engagement and improve return on investment (ROI). AI's ability to analyze vast amounts of data allows businesses to segment their audiences more intelligently and efficiently. By categorizing customers based on traits, interests, and behaviors, companies can design more targeted and effective marketing campaigns, leading to stronger customer engagement and improved ROI (Flinders, 2023). In addition to segmentation, AI-powered chatbots are increasingly being employed to improve customer service. These chatbots can interact with customers throughout their journey, resolving challenges promptly and

effectively, which increases customer satisfaction. As AI technologies continue to advance, the role of chatbots in customer service is expected to expand further (Overgoor et al., 2019, pp. 23-25; Flinders, 2023).

After collecting data and determining target groups, content can be generated by AI, such as product descriptions, social media posts, or even entire articles, based on predefined inputs. This can reduce the time and cost associated with content production while maintaining consistency (Haleem et al., 2022, pp. 120-124; Göring et al., 2023, pp. 5-7). When selling products and services, AI-driven dynamic pricing models can adjust prices in real time based on demand, competition, and other factors. This strategy is used by companies like Uber and airlines to optimize revenue (Eliot, 2024). Programmatic advertising, which involves the automated purchasing and placement of ads, has been significantly enhanced by AI. By analyzing customer history, preferences, and context, AI enables marketers to deliver more relevant ads with higher conversion rates. This level of precision in targeting not only improves the effectiveness of advertising campaigns but also contributes to cost savings (Haleem et al., 2022, pp. 120-122; McKinsey, 2023, pp. 18-20). AI is also transforming search engine optimization (SEO) strategies. By deploying AI solutions, marketers can improve page rankings and develop more effective content strategies. AI assists in optimizing content to align with evolving search engine standards, ensuring that businesses maintain their competitive edge in the digital landscape (Ruisinger, 2020, pp. 199-203; Göring et al., 2023, pp. 5-7). AI significantly impacts e-commerce by advancing digital marketing efforts through a deeper understanding of customer preferences and purchasing patterns. Through the automation of tasks and simplification of workflows, AI helps businesses streamline their operations, ultimately driving growth and customer satisfaction (Flinders, 2023; Labib, 2024, pp. 3-5). Looking ahead, the economic implications of AI are profound. A report by PwC, from Rao and Verweij (2017, p. 4) suggests that global GDP could be up to 14% higher in 2030 due to the accelerating development and adoption of AI. This growth, equivalent to an additional \$15.7 trillion, will be driven by productivity gains from process automation, augmentation of the labor force, and increased consumer demand for AI-enhanced products and services.

Despite its numerous advantages, the integration of AI into marketing is not without challenges. One of the primary obstacles is the complexity of AI systems, which can be particularly daunting for small businesses with limited resources (Şenyapar, 2024, p. 8).

Additionally, ethical concerns, such as data privacy and the potential for biased algorithms, pose significant risks that must be addressed to ensure responsible AI usage (Mogaji et al., 2020, pp. 12-13; Şenyapar, 2024, pp. 10-12). The lack of talent and clear AI roadmaps further complicates adoption. Many firms are still struggling to understand how to effectively implement AI in their operations. According to recent findings, there is a noticeable gap between executives' aspirations and their organizations' readiness to incorporate AI. Few companies currently train their staff on generative AI tools, although 46% plan to do so in the coming years, while 62% prefer to wait for the development of AI regulations (Apotheker et al., 2024, pp. 6-7).

AI is undeniably a powerful tool in the marketing arsenal, offering substantial opportunities for enhancing efficiency, customer engagement, and ROI. However, to fully realize these benefits, businesses must overcome significant challenges, including talent shortages, ethical concerns, and the complexity of AI systems (Kapoor et al., 2024, pp. 4-6). As the technology continues to evolve, it is crucial for organizations to invest in AI strategically, ensuring that they are well-positioned to capitalize on its potential in the future. As of now, approximately 37% of companies have adopted AI, with nine out of ten leading companies investing in this capability (Chui et al., 2023, pp. 7,21). Moreover, the enthusiasm for AI adoption is growing, with 89% of executives ranking AI and generative AI as a top three technology priority for 2024 (Apotheker et al., 2024, pp. 6-8). The future of AI in marketing promises to be transformative, driving both economic growth and technological innovation.

2.3.1 Artificial Intelligence

Artificial Intelligence is the replication of human intelligence in machines, enabling them to perform tasks involving thinking, learning, and problem-solving in a manner analogous to human cognition. The use of AI promises to enable work processes to be simplified, accelerated, or even completely replaced by simulating human intelligence in machines. These machines are fed with extensive datasets that are interconnected. Based on these datasets and through the processing of input and feedback, the system can continuously learn, make decisions, and adapt to meet specific requirements more effectively (Gentsch, 2019, pp. 1-5). The key components of AI include machine learning (ML), natural language processing (NLP), and computer vision, each of which contributes to different functionalities of AI systems (Gunistry, 2024, pp. 76-78; Haleem et al., 2022, pp. 120-122).

The primary motivation for developing AI was the desire to automate complex tasks that typically required human intelligence. However, the evolution of AI has been driven by advances in computational power, the availability of large datasets, and the progression of complex algorithms. For example, the introduction of neural networks and deep learning techniques in the 1980s and 1990s revolutionized AI by enabling machines to recognize patterns in large amounts of data, leading to breakthroughs in fields such as image and speech recognition. Therefore, the emphasis shifted to creating systems that could learn from data and improve their performance over time (Gentsch, 2019, pp. 24-29). More contemporary definitions of AI highlight its capability to simulate human-like intelligence using algorithms and computational models. For instance, Gentsch (2019, pp. 17-18) emphasizes that AI's core objective is to imbue machines with the capability to execute tasks that necessitate human intelligence, including adapting to new environments and making informed decisions. Similarly, Pichler and Hartig (2023, pp. 2-4) describe AI as a technology enabling computers to learn autonomously through accumulated experience.

Artificial Intelligence serves as a transformative force in contemporary technology, enabling the automation of repetitive and routine tasks. This capability enhances operational efficiency and allows human workers to concentrate on more complex and creative endeavors (Gentsch, 2019, pp. 44-45). Furthermore, it can enhance decision-making by analyzing vast amounts of data and uncover patterns to provide businesses with actionable insights (Chui et al., 2023, pp. 14-16). Another potential of AI can be noted by fostering innovation and new capabilities through AI-driven personalization and creating individual

content (Chui et al., 2023, pp. 18-20; Hartmann et al., 2023, pp. 5-8). However, the implementation of AI presents significant challenges, particularly regarding ethical considerations such as bias, privacy, and the potential misuse of autonomous systems. AI algorithms can unintentionally reinforce biases inherent in their training data, resulting in unfair or inequitable outcomes. Furthermore, the use of AI in decision-making raises concerns about accountability and transparency (Gramp et al., 2023, pp. 12-14). Moreover, the automation of tasks enabled by AI presents a substantial risk of job displacement, particularly in roles that involve routine or manual labor. This could lead to economic and social challenges when jobs are being rendered obsolete (Chui et al., 2023, pp. 22-23). Another important aspect is the security risks of AI systems. Especially those that operate autonomously are vulnerable to security breaches and cyberattacks. Malicious actors can exploit AI for nefarious purposes, such as creating deepfakes, automated cyberattacks, or even autonomous weapons, posing significant security risks (Gentsch, 2019, pp. 44-45; Luber, 2023, pp. 100-102).

2.3.2 AI Technologies and Tools

To incorporate AI technologies and its tools into the Marketing Communication Process, it is crucial to understand the different kinds of technologies and in what matters they can be used best, which also applies for AI tools. This multifaceted field encompasses various specialized domains, as including Generative Artificial Intelligence (Gen AI), ML, Deep Learning, NLP, Computer Vision, and Robotics, as mentioned above.

Gen AI creates new content, such as human-like texts, images, videos, music, or code, by learning patterns from large datasets. These models, typically based on advanced neural network architectures like transformers, are pre-trained on diverse data and fine-tuned for specific applications (Brynjolfsson et al., 2023, pp. 5-7; Akhtar, 2024, pp. 23-25). ChatGPT, Gemini, or Midjourney are examples of AI tools that use Generative AI. ChatGPT's and Gemini's GPTs also make use of Machine Learning, which refers to a range of computer-based methods used for data mining, enabling the discovery of complex patterns within large datasets through automated processes rather than explicit programming instructions (Salminen et al., 2019, pp. 203-205; Wasnik, 2019, pp. 793-794). With the identified data, predictions or decisions based on that data can be made (Duarte & Ståhl, 2018, p. 67).

ML is divided into three primary learning paradigms: supervised learning, unsupervised learning, and reinforcement learning, each employing unique methodologies and serving different applications (Chitralkha & Roogi, 2021, pp. 9-10; Pichler and Hartig, 2023, p. 115). These learning paradigms can also be combined, resulting in semi-supervised or hybrid learning approaches (Bagherzadeh & Asil, 2018, pp. 55-57). Deep Learning, a subfield of ML, employs artificial neural networks to model complex patterns in data. Prominent technologies within this domain are Convolutional Neural Networks (CNNs), which are particularly effective for image-related tasks such as recognition, segmentation, and feature extraction, and Generative Adversarial Networks (GANs), consisting of a generator and a discriminator that engage in a competitive process to create increasingly realistic data samples (Bagherzadeh & Asil, 2018, pp. 59-62; Nicholas, 2020, p. 713). This deep learning technology is applied by AI tools like DALL-E and Runway ML (KI-Tools - Portal Digitale Lehre, 2024). These deep learning techniques have revolutionized areas such as image generation and editing, showcasing the transformative potential of AI.

NLP is a pivotal AI component that enables machines to comprehend, interpret, and generate human language, which is outperformed by AI tools like ChatGPT, Jasper AI, or HubSpot (Rivas & Zhao, 2023, pp. 375–377; HubSpot, 2024, pp. 4–7). NLP encompasses various applications, including text classification, sentiment analysis, and language translation (Juhi & Kumar, 2018, pp. 12–15). Techniques such as Long Short-Term Memory (LSTM) networks play a crucial role in processing sequential data, making them integral to NLP tasks like language modeling and text generation (Shrestha & Mahmood, 2019, p. 53048).

Computer Vision extends AI's capabilities to visual data, allowing machines to process and interpret images and videos. Applications of Computer Vision include facial recognition, object detection, and video analysis, all of which rely on sophisticated algorithms to extract meaningful information from visual inputs, as in the AI tools Adobe Firefly, or Dall-E (Juhi & Kumar, 2020, pp. 23–27). The integration of Computer Vision with other AI technologies, such as deep learning, has led to significant advancements in the accuracy and applicability of visual recognition systems (HubSpot, 2024, pp. 15–17). AI's application in robotics exemplifies the integration of intelligent systems with physical machines, enabling autonomous operation in dynamic environments.

Robotics leverages AI to control and adapt the behavior of machines, reducing the need for human intervention (Gentsch, 2019, pp. 211–214). This capability is particularly evident in industrial, service, and military robotics for repetitive, or precise tasks and in fields such as medicine, finance, and engineering to solve complex problems by Rule-based reasoning (Gentsch, 2019, pp. 215–217). Autonomous systems, which integrate AI for navigation and decision-making, represent a convergence of various AI technologies, further extending the potential of intelligent machines.

To understand the hierarchy and connections between the different AI technologies Figure 2 provides an overview, showing that AI is the overarching technology that includes the previously named technologies. Those have some similar and overlapping structures, like NLP with ML and Deep Learning, but might also completely differ in its construction like NLP and Robotics.

Overview of the Hierarchy and interconnection between AI Technologies

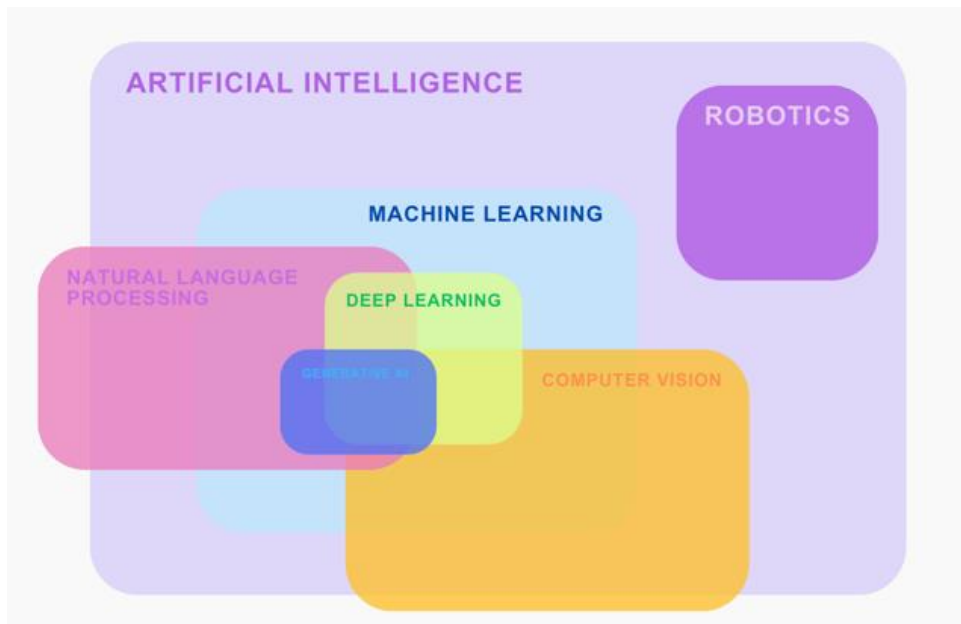


Figure 2: Hierarchy and interconnection between AI Technologies. Own creation based on Juhi & Kumar, 2018, pp. 10–15; Gentsch, 2019, pp. 18–22 and Juhi & Kumar, 2020, pp. 20–25.

Every one of these technologies is based on collections of computing packages, developed frameworks, or open-source libraries built on programming languages, designed to build complex AI applications (Keras, n.d.; NVIDIA, n.d.; spaCy, n.d.). In this context, the Generative Pre-trained Transformers (GPTs) play a crucial role, as these are highly advanced NLPs for AI and Gen AI models, designed to understand and generate human-like text. They complement other AI technologies like Computer Vision and Robotics, while also opening new avenues for creative and professional applications (Akhtar, 2024, pp. 12-15; Lammenett, 2024, pp. 40-43). Various AI tools contain complex technologies, but have a reduced barrier for use, natural language or visual data can be used to outperform AI-driven tasks, whereas no in-depth understanding of the testing technology or programming languages is required.

As these Tools consist of well-trained systems built upon specific algorithms, the AI models can also be trained. These changes and training mostly function by inserting more and more data and giving the model information, details, and examples to cluster data and create a desired outcome (Hartmann et al., 2023, pp. 23-25). Model training forms the foundation by allowing algorithms to learn from processed data. Common algorithms include supervised learning, where models predict outcomes like customer churn based on labeled historical data, and unsupervised learning, which is used for tasks such as customer segmentation without predefined categories (Shrestha and Mahmood, 2019, 53043). Additionally,

reinforcement learning enables algorithms to interact with dynamic environments and optimize strategies, such as pricing, through feedback mechanisms. However, many algorithms are not inherently optimized for multilabel classification, which presents a challenge in marketing contexts that involve predicting multiple outcomes. Alternative approaches, such as training separate models for each label, can be employed to address this limitation. Optimizing these algorithms for marketing use cases ensures better performance in complex decision-making scenarios (Salminen et al., 2019, pp. 7-9).

2.3.3 Prompts for AI tools

As explained in the previous part, a crucial step for reaching an expected outcome is to train the algorithm behind the tool. When the right tool for the task is chosen and the base is set, training the algorithm and “feeding” the dataset with various examples and information is essential. The next step is to write the prompt in a way that is detailed and accurate enough for the tool to achieve the desired outcome (Zamfirescu-Pereira et al., 2023, pp. 45-47).

Prompting involves giving specific instructions or questions to an AI model to elicit a particular response. In essence, a prompt is the text or query you input into an AI system to guide it in generating an output, whether that’s text, images, code, or other types of data. The creation and writing of a prompt is named prompt engineering and is a learned skill that includes writing a text in a specific way, including details and keywords that explain the desired outcome. The detailed keywords are named “prompt modifiers” and can have a significant impact on the result (Oppenlaender, 2023, pp. 9-12).

Prompts can be seen as a request, question, or task. As with a survey, the questions addressed to the AI can be divided into (Friborg & Rosenvinge, 2011, pp. 211-213; Hansen & Świdorska, 2023, pp. 35-37):

- Open-ended Prompts, which allow for a broad range of responses.
- Closed-ended Prompts, which are more specific and aim to get a direct answer.
- Instruction-based Prompts, which guide the AI to perform a particular task.

The effectiveness of AI-generated content largely depends on the quality and clarity of the prompt. A well-crafted prompt can lead to highly accurate and relevant outputs, while a vague or poorly structured prompt may result in suboptimal responses (White et al., 2023, pp. 14-16). There is no single correct way to write prompts, but many approaches can be used to achieve the desired result through AI. Several attempts may be necessary to achieve the goal, whereby it is clear that prompting is currently a trial-and-error method of working. That is why prompting is a skill that can be learned and enhanced through repeated practice (Zamfirescu-Pereira et al., 2023, pp. 48-50).

Thus, there are a few indications of reference that can be considered when prompting, to ensure that the result is as close as possible to the desired target. Optimizing AI prompts requires clearly defined objectives, ensuring a precise understanding of the desired outcome, whether it involves generating detailed analyses, creative outputs, or specific

responses. Be specific and provide relevant context, as this helps the AI generate more focused responses. Iteration is crucial—start with a broad prompt, then refine based on the results, adjusting phrasing and detail (Mohammad et al., 2023, pp. 12–14; White et al., 2023, pp. 20–22). Using constraints, such as word limits or instructions, ensures more precise outputs. Including examples in your prompts can further guide the AI, and understanding the model's limitations allows you to tailor prompts to its strengths. Engaging with communities and continuously learning about prompting techniques are also key to improvement. One example would be the use of polite phrasing when a question or task is posed to the AI tool. In addition, entailing a consistent arrangement of prompts with a focus on detailed, feasible comments contributes to a better result (Mohammad et al., 2023, pp. 14–15; Zamfirescu-Pereira et al., 2023, pp. 50–52).

Current scientific research shows that prompting frameworks and guidelines are in the early stages. Nevertheless, software AI programs like DALL-E or ChatGPT, as well as experts or users of AI forums, suggest tips, tweaked knowledge, and use cases to help achieve the desired outcome when inserting prompts in an AI application. AI experts and forums suggest prompting frameworks to unleash the full potential of AI tools usage. These frameworks are simple guidelines that can be used like a template, by inserting information in a predetermined construct to achieve the desired result. “ERA,” an example by Edi Hezri Hairi (2023), means “Expectation, Role, Action” and gives an example of how a prompt can be structured. First, the desired result should be defined, then the role that the AI software should assume, and actions the AI should take must be outlined (Hairi, 2023). Another example made with the acronym “CARE” represents the Prompting Framework for “Context, Action, Result, and Example” (Hairi, 2023). Another suggestion is to create clear questions or inquiries, to “break down tasks into chunks” (Blakely, 2024), add examples, and process and readjust. DALL-E focuses on image generation and proposes creating detailed prompts when striving for a specific result. Adding adjectives that already include components leads to distinct prompts, whereas it is possibly beneficial to know and include styles, eras, effects, or materials when having a precise idea of the outcome (DALL-E, 2022, pp. 5–7).

2.3.4 Usage of AI in visual Marketing

When talking about creating visuals with AI, the term Gen AI (Generative Artificial Intelligence) is predominant. Gen AI refers to systems that are created to generate new, realistic content such as images, videos, or text by using ML or Neural Networks. The outcome is newly generated content developed from patterns and information in extensive datasets, rather than analyzing or classifying data (BCG, n.d., pp. 7–9). Generative AI uses technologies like GANs or Variational Autoencoders (VAEs), which create new data based on learned patterns and comparisons to real data (Akhtar, 2024, pp. 10–13; Kim et al., 2024, pp. 30–34). While both traditional AI and Generative AI rely on machine learning, they differ significantly in their objectives and applications. Traditional AI, particularly in visual marketing, is often used for tasks such as image recognition, classification, and predictive analytics. These systems are trained to detect specific patterns or identify objects within visual content (Akhtar, 2024, pp. 14–16; Hartmann et al., 2023, pp. 25–27). Generative AI, on the other hand, focuses on creating new content. For instance, Gen AI could generate a realistic-looking image of an object it has never seen before. Traditional AI models might analyze customer engagement with a particular ad, while Gen AI could create entirely new visual content for marketing campaigns, personalizing ads for individual consumers based on learned preferences and trends (Hartmann et al., 2023, pp. 28–30).

When it comes to marketing, content creation, and distribution, Generative AI can be leveraged effectively (Deveau et al., 2023, pp. 2–4; Harkness et al., 2023, pp. 3–5). Generative AI tools enable companies to create various marketing materials, such as banners and digital ads, tailored to different audiences. By analyzing consumer data, these tools can produce personalized visuals that enhance user engagement. They also allow marketers to quickly generate multiple design concepts, speeding up the prototyping process. Additionally, Gen AI enables the development of dynamic content that adjusts in real-time in response to customer interactions. This capability helps brands deliver more responsive and relevant visual experiences to their audiences (Hartmann et al., 2023, pp. 31–34; BCG, n.d., pp. 10–12).

Since Gen AI promises the possibility to work more efficiently and its technologies can represent a turning point in marketing communication and content creation, various tools are available that offer AI implementation in visual marketing communication (Kim et al., 2024, pp. 35–38). AI tools like DALL-E, Midjourney, Runway, and Artbreeder, to name a

few, empower marketers to create high-quality, unique visuals with minimal effort. DALL·E generates creative content from text prompts, while Midjourney produces professional-grade visuals for advertising (Hartmann et al., 2023, pp. 36–38). Runway simplifies image and video creation through its user-friendly editing capabilities, and Artbreeder allows for the combination of visual elements to generate unique images. These tools significantly boost marketers' efficiency, enabling scalable content production with fewer resources (Akhtar, 2024, pp. 17–19; BCG, n.d., pp. 13–15).

Generative AI offers several advantages for marketing, notably improving efficiency by reducing the time required to create visuals and allowing for rapid iterations. Its cost-effectiveness stems from automating visual production, minimizing the need for human designers, while enabling hyper-personalization to increase user engagement. Gen AI also supports scalability, enabling the creation of large-scale campaigns without a proportional increase in resources. However, challenges arise in quality control, as AI-generated content can exhibit errors or lack the nuanced creativity of human designers. Additional concerns include ethical issues related to authenticity, limitations in generating truly original concepts, and potential biases in the training data, which may affect fairness and inclusivity (Kim et al., 2024).

2.4 Use Case PUMA Marketing Central Europe

The following sections of this master thesis will delve into PUMA Marketing Central Europe, which is selected as the case study for this research. This segment will begin with an exploration of PUMA SE, including a detailed overview of its organizational structure and operational framework. Further it will provide a foundational understanding of key principles and practices within the field of sports marketing. The second segment will cover PUMA's Business Units (BUs), which cater to various market segments. Additionally, the analysis will address PUMA's marketing channels, including Above The Line (ATL) and Below The Line (BTL) strategies, and its stakeholder ecosystem, encompassing customers, retail partners, suppliers, employees, investors, sports teams, and local communities. By thoroughly examining these aspects, the thesis aims to provide a comprehensive understanding of PUMA's marketing strategies and business operations within the Central European context. The following case study will examine the efficiency of an AI Tool approach compared to a non-AI approach, shown on an example of a Home Jersey Campaign of the German first league football club FC St. Pauli. Therefore, the non-AI workflow of the creation of Assets for the campaign will be described to in order to subsequently understand the comparison with the differences to a fully AI operating process.

2.4.1 PUMA SE

PUMA, founded in 1948 in Germany, is a globally recognized sports brand specializing in textiles, footwear, and accessories, divided into "Performance" and "Sportstyle" categories (PUMA SE, no date). The Performance segment includes products for football, running, training, motorsport, and golf, while Sportstyle reflects PUMA's influence in athleisure and fashion. PUMA's success is driven by collaborations with designers, influencers, and athletes, partnering with fashion brands like Noah and Palomo Spain (PUMA SE, 2023, pp. 15-17). The brand operates in over 120 countries, with more than 21,000 employees globally, and focuses on innovation, sustainability, and digital processes to enhance infrastructure. PUMA's slogan, "Forever Faster," symbolizes its competitive spirit, and the brand emphasizes values like bravery, confidence, and determination (PUMA SE, 2023, p. 6). PUMA leverages social media and digital platforms to engage consumers and collaborates with athletes, clubs, and celebrities like BLACKPINK's Rosé and Rihanna, whose FENTY collection has been especially influential (Turincio, 2024, p. 34). The brand's global operations are divided into EMEA, Americas, and Asia/Pacific, with significant growth in key regions like the DACH area (PUMA SE, no date).

Sports marketing focuses on promoting sports events, teams, and related products to build brand visibility and consumer loyalty. It employs strategies like sponsorships, endorsements, and digital campaigns to engage a global audience. Modern sports marketing relies on data-driven approaches and social media to strengthen brand associations and foster fan engagement (Bruhn & Rohlmann, 2022, pp. 3–7). Sports play a significant role in the lives of young adults, particularly Generation Z, for whom being active is crucial to achieving life goals (Alodia et al., 2023, pp. 14–17; Van Den Bergh et al., 2023, pp. 22–25). Digital technologies, such as virtual and augmented reality, are transforming consumer experiences in the sports industry, while social media and influencers play a key role in connecting brands with younger audiences (Jeswani, 2023, pp. 54–56). Sustainability has become a major focus, with brands adopting eco-friendly materials and transparent production practices to attract environmentally conscious consumers (Zver & Vukasović, 2021, pp. 12–15; Patil et al., 2024, pp. 318–320). In addition, sports brands are building communities through events and sponsorships to foster loyalty (Pastor et al., 2023, pp. 63–65). The rise of e-sports presents new marketing opportunities, with brands collaborating with gaming platforms to reach tech-savvy audiences (Bousquet & Ertz, 2021, pp. 45–48).

Understanding and adapting to these trends is crucial for sports brands to maintain relevance and build long-lasting customer loyalty.

2.4.2 Business, Channels and Stakeholder

PUMA SE organizes its product offerings into distinct BUs to cater to various market segments and customer needs. These BUs include Accessories, Cross Category, Generic, Golf, Holiday, Kids, Motorsport, Running, Training, Sportstyle, Teamsport, Selects, Prime, and Basketball, each focusing on specific product areas and market demands. For instance, the Golf BU provides specialized equipment for golfers, while the Sportstyle BU blends sportswear with casual fashion (PUMA SE, no date). PUMA's structure enables targeted product development and marketing strategies tailored to diverse consumer interests. The company employs multiple channels to engage with its audience effectively. These include ATL and BTL strategies such as sell-in content for retailers, in-store promotions, event-based marketing, stadium assets, public relations, e-commerce digital content, brand-building materials, and social media engagement. Each channel is designed to enhance customer interactions and drive brand loyalty across various touchpoints (PUMA SE, 2023, pp. 45–48).

PUMA's success hinges on a wide range of stakeholders. Customers provide feedback that shapes product development and marketing, while retail partners and suppliers are crucial for distribution and product quality. Employees contribute to all aspects of operations, and investors monitor financial performance (PUMA SE, 2023, pp. 6–9). Sponsored sports teams and athletes act as brand ambassadors, enhancing PUMA's visibility and credibility. Additionally, PUMA engages with local communities, government, and regulatory bodies to uphold corporate social responsibility and ensure regulatory compliance (PUMA SE, 2023, pp. 12–14). This structure highlights PUMA SE's strategic approach to product management, marketing, and stakeholder engagement, reflecting its commitment to addressing diverse market needs while maintaining a strong brand presence.

2.4.3 Non-AI Campaign creation workflow

To create and outperform a creative campaign to finalize assets for marketing communication on different channels, such as social media, or In-Store Material, several courses of action are needed. The following Figure 3 displays the workflow of the Creative Service Team of PUMA SE, including the necessary steps. The process can be clustered into three pillars, which start with the pre-production, continue with the production and end with the post-production.

In the Pre-Production the focus lies on creating a creative direction, planning the corresponding process and manage organizational tasks, like booking and briefing the production crew. The next step is the production itself, which has its key role in executing the shoot, where responsibilities such as on-set art direction, digital operations, and assistance are prioritized to ensure seamless operations. Lastly, in the post-production phase, critical tasks include selecting images for various channels, retouching to define the visual identity, and structuring and releasing files. Additional adjustments, such as resizing images for specific platforms, ensure the campaign aligns with guidelines across e-commerce and traditional media. This structured approach is essential for a cohesive and impactful campaign to ensure a smooth workflow and achieving the desired results.

Campaign creation workflow (Non-AI)

Pre-Production	Production	Post-Production
<p>Creative Planning</p> <ul style="list-style-type: none"> Sample Order Deliverables List Unpack and assort samples Define Models and Talents Product Overview Creative Concept Briefings for Crew <p>Production Planning</p> <ul style="list-style-type: none"> Producer Location and scouting Set Design Props Bookings Run of Show Production Deck Filename Overview Deliverables List Call Sheets Cost Estimates Transport 	<p>Shoot</p> <ul style="list-style-type: none"> Photographer Photographer Assistant Light and Grip Gaffer Runner Equipment Digital Operator Stylist Hair & Makeup Choreographer Behind-the-Scenes Set Design Transport Art Direction Backup and Safety Copy Picture Upload Worklist Catering 	<p>Image Selection</p> <ul style="list-style-type: none"> Campaign E-Commerce (ECOM) Public Relations (PR) Social media <p>Retouching</p> <ul style="list-style-type: none"> Look Definition Briefing & Timing Retouching Feedback rounds Composing Resizes <p>Structure data</p> <ul style="list-style-type: none"> Data upload Create download files Build Data Structure Create Guidelines Worn list

Figure 3: Campaign Creation Workflow of PUMA SE Creative Services. Own creation.

3. Methodology

The aim of this study is, to comprehensively address the research question and to be able to understand the advantages, disadvantages and opportunities of using AI tools in the creation of content for marketing purposes, this study employs a mixed-methods approach. With a greater emphasis on extracting qualitative data from contextual insights, such methods are commonly employed in studies that aim to generate new ideas, approaches, and concepts, adopt an exploratory orientation, and pursue in-depth understanding (Scholl, 2015, p. 21). Therefore, the following three hypotheses will build the base of a robust framework for analyzing the role of AI in the Marketing Communication Process to answer what steps can be replaced by AI and whether Agencies be substituted. This will be carried out by integrating both qualitative and quantitative research methods to conduct analysis and to infer results in an exploratory manner, as researching on a new, rapidly evolving technology (Elman, Gerring and Mahoney, 2020, p. 18).

Hypothesis 1: For every step of the Marketing Communication Process, at least one AI tool exist that proposes a viable alternative to conventional non-AI approaches.

Hypothesis 2: AI tools in the Marketing Communication Process yield comparable quality, creativity, and strategic alignment to those achieved without AI, indicating that AI can fully substitute agency-driven work.

Hypothesis 3: AI-driven tools used in the Marketing Communication Process for content creation result by 50% higher efficiency, with reduced time and costs expenditures, compared to traditional non-AI approaches, without compromising the quality of content.

3.1 Hypothesis 1 – Application of Literature Review

Hypothesis 1

For every step of the Marketing Communication Process, at least one AI Tool exists that proposes a viable alternative to conventional non-AI approaches.

Research Approach

This research adopts a qualitative approach to investigate how Artificial Intelligence (AI) tools can substitute or augment each stage of the Marketing Communication Process. Since there is no general Marketing Communication Process, but various approaches and implementations, as described above, a combination of the phase model for planning integrated communication by Fuchs & Unger (2014, pp. 56-60) and the digital communication strategy by Ruisinger (2020, pp. 199-203) will be held as an example. Due to the rapidly evolving nature of AI applications in marketing, an exploratory methodology is suitable for understanding a breadth of tools and their functionalities rather than testing a narrowly defined causal relationship. The primary goal is to identify and categorize AI tools that address specific tasks within the Marketing Communication Process (situational analysis, strategic planning, operational planning, implementation, and monitoring and evaluation). A qualitative approach enables the capture of nuanced insights about each AI tool's functionality, ease of use, limitations, and potential for integration into marketing processes (Ambert *et al.*, 1995, p. 718). Through this lens, the study seeks to establish broad patterns and emerging themes regarding AI tools and their adaptability for various marketing communication needs.

Research Data

A thorough literature review serves as the foundational component of data collection. Academic databases (e.g., Scopus, Web of Science) and industry reports (e.g., Gartner, Forrester) are systematically being queried using keywords such as "AI in marketing," "marketing communication," "AI tools," "marketing automation," and "digital marketing platforms." Both peer-reviewed articles and reputable business sources are included to ensure a comprehensive perspective on current AI technologies. As it is a current and rapidly changing topic, reviewed literature is limited and, in some cases, not up to date, so grey literature is being used to create a comprehensive overview of the digital landscape of latest AI tools (Benzies *et al.*, 2006, p. 55-61). In parallel this literature, websites, user

reviews and studies were consulted to verify each tool's AI claims and to understand how the tools operate in practice. Only AI tools explicitly referencing the use of machine learning, natural language processing, or other AI-specific functionalities were considered. Tools that merely offered automated (but non-AI-driven) features were excluded. This narrowed the scope to platforms integrating genuine AI capabilities. Additionally, tools had to be relevant to at least one step of the Marketing Communication Process as traditionally defined.

Data Analysis and Compilation

Through thematic coding the researched AI Tools are chosen and classified, according to their fit and possibility of use into at least one stage of the Marketing Communication Process. Then each tool is being tagged with its key functionalities based on its primary AI functions. Following the initial coding, a cross-referencing phase ensued where tools that appeared under multiple stages were flagged for broader applicability. Data extracted from these sources are being organized in an overview, which facilitates the preliminary coding of each tool's relevance to specific marketing stages. Tools that span multiple stages (e.g., holistic AI platforms) are being grouped separately to understand their broader application potential.

3.2 Hypothesis 2 – Execution of expert interviews

Hypothesis 2

AI tools in the Marketing Communication Process yield comparable quality, creativity, and strategic alignment to those achieved without AI, indicating that AI can fully substitute agency-driven work.

Research Approach

The research employed a qualitative and interpretive approach to explore whether AI tools in the Marketing Communication Process yield comparable quality, creativity, and strategic alignment to those achieved without AI, by investigating the potential for AI to fully substitute agency-driven work. Given the evolving nature of AI technology and its multifaceted applications, a qualitative approach was suitable to capture the complexities, perceptions, and lived experiences of industry professionals (Bogner, Littig and Menz, 2014, p. 25-28). Therefore, an expert interview, structured after Mayring (Kaiser, 2014, p.7 ; Helfferich, 2022, pp. 875-881), is being conducted that is based on the qualitative research method for investigating subjective experiences, perceptions, and opinions. This method helps to gain in-depth knowledge enables a rich exploration of the topic, allowing for flexibility and discovery. This interpretive stance to uncover nuances regarding effectiveness, efficiency, quality, substitution potential, limitations, and skills requirements.

Research Design and Data Collection

To conduct structured expert interviews a purposive sampling strategy is employed to identify experts with significant experience in marketing communications in using AI for its implementation, or for campaign ideation and execution. Participants are selected from digital marketing agencies, information technology and marketing departments. These experts are primarily to be seen as representatives of the marketing communication and AI sector who cover the characteristics and aspects to be examined in the sample as shown in table 4. A target of 7 experts is set to ensure diversity in perspectives.

The guideline of the expert interview is structured as a semi-structured interview to ensure consistency by covering key topics related to the research question and hypothesis, but also allow for open-ended discussions, that experts can elaborate on aspects they find most relevant or insightful (Ambert *et al.*, 1995, p. 727). Moreover, a semi-structured interview

encourages a conversational flow, which can lead to the discovery of information. To structure the interview after the principle of deductive reasoning, a combination of open-ended and probing questions ensures that the interview explores both the broad and specific aspects of AI tool use in marketing.

Data Analysis Method

After the expert interviews are conducted and recorded, they are being transcribed and coded. Inductive category development is used to structure the sentence components in order to group together identical, similar or related components and assign them to a superordinate category (Kaiser, 2014, p.7). Once this overview has been created, the data is being analyzed. A coding scheme, partly deductive and partly inductive is applied to each transcript, including the following broad codes:

1. Effectiveness
2. Efficiency
3. Quality of Outcome
4. Substitution Potential
5. Limitations and Risks
6. Skills and Knowledge

Points of convergence and divergence are noted to form a cohesive narrative regarding AI's ability to match and replace human-driven processes.

Overview of experts

Nr.	Appendix	Position	Field of Knowledge
1	7.2	Head of Cultural Insights & Trends	Digital Transformation, Emerging Tech, KI, AR/VR, Web 3.0
2	7.3	Managing Consultant	Digital Strategies, Digital transformation, AI implementation
3	7.4	Team Head Account Management	Digital Marketing Strategies, Project Management, Communication
4	7.5	Project Manager IT Digital Workplace Solutions	Digital Workplace Solutions, IT Security and Compliance
5	7.6	Senior Creative Manager	Creation and Ideation, Creative Communication, AI
6	7.7	CEO & Founder of a digital agency	Creation, AI implementation, business development, Marketing and Brand communication
7	7.8	Managing Director Business Development	Marketing, digital Transformation

Table 4: Overview of experts. Own creation.

The interview will be structured as follows. Starting the interview with an introduction and consent, by welcoming the expert and explaining the field of investigation, by explaining the

purpose of the interview shortly to establish context, create trust and set the stage for open and honest responses.

The first of 5 pillars of questions opens with general questions to understand the expert's current use and attitude towards AI tools. Secondly, the expert is being asked about the decision-making process, tool preferences, and ongoing learning, helping to explain how and why they engage with AI tools. It also provides insight into the tools that are working well and those that aren't, offering qualitative data that speaks to the perceived strengths and weaknesses of AI tools. Question pillar number three is tackling the compare between AI tools and traditional methods and assessing their effectiveness. These questions shall explore specific experiences and measurable outcomes with AI tools in the Marketing Communication Processes. Section four ties directly into the hypothesis, by asking about the future of AI in Marketing Communication and whether experts believe AI tools could become powerful enough to replace traditional processes entirely, thus addressing the central research question. Finishing with an open-ended question to give the expert an opportunity for additional insights or overlooked areas to emerge, providing further depth and data.

Overview of the interview guideline:

1. Introduction and Consent
2. Background Information on AI Tool Usage
3. Use Cases and Effectiveness
4. Tools Preferences and Discovery
5. Future of AI in Marketing Communication Process
6. Closing Remarks

3.3 Hypothesis 3 – Implementation of the Case Study

Hypothesis 3

AI-driven tools used in the Marketing Communication Process result in higher efficiency—with reduced time and cost expenditures—compared to traditional non-AI approaches, without compromising the quality of the campaign.

Research Approach

To evaluate the third Hypothesis, a mixed-methods framework will guide this phase, incorporating both quantitative metrics, by assessing time and cost and qualitative assessments, by evaluation of final imagery (Timans, Wouters and Heilbron, 2019, pp. 207-209) . The goal is to determine if efficiency gains of 50% or more, could be realized by AI workflows, while maintaining comparable quality. The methodology focuses on analyzing the efficiency and quality outcomes of AI-based workflows versus traditional non-AI approaches in creating marketing communication assets. Therefore, a comparative case study was designed to directly contrast a non-AI workflow with traditional production methods, like physical shoots, full teams, manual retouching compared to an AI workflow, by automated or semi-automated tasks using tools like, ChatGPT, Midjourney, AI-enhanced Photoshop (Ambert *et al.*, 1995, pp. 727-729). Both workflows addressed the same creative brief ensuring that time, cost, and output quality data were comparable.

Data sources

This case study will center on a creative marketing campaign for the German football club FC St. Pauli, by its outfitter PUMA. This example is being used as a representative of various photo productions that must fulfill certain requirements in terms of guidelines and company specifications and can be used for various digital content. A comparison can be stated as the campaign was executed by the PUMA Marketing Creative Service Team, starting February 2024, using conventional non-AI methods, while working closely with a creative agency. To provide a comparison, the executed campaign will be reenacted by using AI tools and inserting all information that the PUMA Team and the creative agency had, before starting with the development, like the Jersey and it's Story, the company, shooting and posing guidelines as well as Brand Guides from PUMA and FC St. Pauli.

Data collection and evaluation

First the quantitative data examined by the implementation of the non-AI and AI Campaign are being compared. The Evaluation Criteria is based on two parameters. The first one is efficiency, looking at time and cost expenses in each phase of content creation, from ideation to final delivery. A table with a listing of the typical workflow and of the creation of marketing assets with non-AI tools will be incorporated with the workflow of an AI created campaign. Every step is provided with the approximate amount of time and cost needed to create the results. For the non-AI approach rounded data is derived by the real implementation of the campaign. The numbers and data for the AI realization refers to the time required for realization and the costs are calculated by the time needed and on the basis of the costs charged by the agency currently working with the PUMA creative service team. It must be noted that the time and money spent on each step may vary from expert to expert and should be seen as an indication, rather than a fixed number.

Secondly the implementation of the workflow for AI-generated images is being described and assessed. The creation begins with briefing ChatGPT to generate a detailed prompt that integrates creative directions from PUMA's global guidelines, specifications of FC St. Pauli's home jersey, and the club's branding elements. ChatGPT is used iteratively to refine the initial ideas and elaborate on potential backdrops, ensuring the prompt is tailored to meet both creative and technical requirements. Once finalized, the prompt is input into Midjourney alongside supporting materials, including reference images of key individuals to guide facial feature generation, style references to establish the desired visual tone, and specific aspect ratios to meet the intended formats. Midjourney produces images, based on these inputs. Through an iterative process, these are being refined by generating both subtle and strong variations, adjusting specific elements like composition and lighting. The outputs are then analyzed, and the most suitable image is selected for further enhancement in Photoshop.

To evaluate and assess the outcome a scoring framework with a scale from low (1) to high (5) is being used to define the accuracy, quality and flawlessness of the final content. By Accuracy the face and recognition value, the look and placement of the logo, as well as the jersey color and pattern will be examined. The second pillar, quality, will check the quantity of data and its resolution. The last pillar is an examination of irritations in the final outcomes.

3.4 Data Quality and Research Ethics

Ensuring both data quality and adherence to ethical standards was integral throughout the research process. Data quality was addressed by following consistent protocols and using structured tools across all hypotheses. In Hypotheses 1 and 2, qualitative investigations were done, whilst a comparative study is carried out to answer Hypothesis 3. Each task was thoroughly documented to foster reliability, and thematic coding frameworks, time/cost logs, and standardized scoring rubrics further minimized the risk of subjective or inconsistent data collection. To enhance validity, the study design for Hypothesis 3 applied an identical creative brief in both AI-driven and traditional workflows, thereby avoiding scope differences as a confounding factor. But it should be noted that the workflows differ in terms of the various tasks required. Moreover, all data, including interview transcripts, AI-tool functionalities, and performance metrics, were systematically archived to maintain transparency and provide a clear audit trail. Research ethics were observed by obtaining informed consent from experts and participants, who received comprehensive information about the objectives, scope, and voluntary nature of the study. Any personal or proprietary information shared during interviews was anonymized, and time or cost data that could reveal commercially sensitive information were presented only in aggregated or obscured form. All participants signed a declaration of consent to be able to use the data for this thesis.

4. Result

In the following chapter the results and the individual hypotheses will be presented. Each of the three hypotheses will be outlined in one section. Section 4.1 creates an overview of AI tools, that can be used in the different pillars of the Marketing Communication process. Continuing with 4.2 to give insights on the usage and applicability of AI tools focusing on effectiveness, efficiency, quality, substitution potential, needed skills, as well as limits and risks, based on expert interviews. The last section 4.3 shows a valuation on how applicable AI tools on a real use case to decide on its effectiveness and qualitative outcome.

4.1 Hypothesis 1 – Substitution of the Marketing Communication Process by AI Tools

AI tools in marketing often vary significantly in scope. Some are highly specialized to fulfill specific needs, while others are more versatile, offering a wide array of functionalities. Consequently, this analysis enables both a process-based breakdown of individual tasks and the assignment of relevant tools for each stage, as well as the identification of comprehensive AI solutions capable of addressing the entire marketing process through broad functionalities and, in some cases, tool integration. Accordingly, table 5, shows an overview of the entire marketing process, featuring AI tools mapped to individual process steps alongside an explanation of the tools and further note to advantages and disadvantages. A compilation of holistic tools and its evaluation is provided below. The AI tools listed are classified as “AI tools” due to their exclusive use of AI technologies or the integration of AI technologies and plugins within their broader, non-AI software applications. The findings show substantial evidence in favor of this hypothesis, confirming that AI-based solutions are already available promising to replace or complement traditional methods. Risks and errors must be taken into account when using these tools. Further, there must be an executor who gives the instructions and describes which output is desired. In addition, some tools require specific input from the user to carry out the process step.

AI tools that support the Marketing Communication Process

Step	AI Tools	Description
1. Situational & Market Analysis	Microsoft Power BI	Data visualization, interactive dashboards, business intelligence.
	Brandwatch	Social media monitoring, brand insights, audience sentiment.
	Mixpanel	User behavior tracking, engagement analytics, digital products.
	Google Analytics AI (GA4)	Website performance, predictive analytics, user trends.
	SEMrush	SEO, keyword research, content marketing, competitor analysis.
2. Strategic Planning	Mixpanel	User behavior tracking, engagement analytics, digital products.
	Miro AI	Collaborative whiteboarding, AI suggestions, ideation tools.
	HubSpot	CRM, marketing automation, sales tools, customer service.
	Daydrm.ai	Creative ideas, ad copywriting, AI content.
3. Operational Planning	Canva	Graphic design, templates, drag-and-drop tools.
	Copy.ai	Content automation, marketing copy, blogs, emails.
	Jasper AI	AI-generated content, marketing, blogs, social media.
	Grammarly	Grammar checking, punctuation, style suggestions.
	Hootsuite AI	Social media scheduling, analytics, engagement optimization.
4. Implementation and Creation	Adobe Creative Cloud	Design tools, video editing, photography, web development.
	Midjourney	AI artwork, image generation, text-to-image.
	Stable diffusion	Realistic images, stylized visuals, text-to-image.
	Runway ML	Video editing, visual effects, creative generation.
	Hootsuite AI	Social media scheduling, analytics, engagement optimization.
	Shai Creative	Creates Storyboards and Shot lists via AI
	Canva	Graphic design, templates, drag-and-drop tools.
5. Monitoring & Evaluation	Google Analytics AI (GA4)	Website performance, predictive analytics, user trends.
	Mixpanel	User behavior tracking, engagement analytics, digital products.
	Hootsuite AI	Social media scheduling, analytics, engagement optimization.

Table 5: AI tools that support the Marketing Communication Process. Own creation.

4.1.1 Situational and Market Analysis

The first phase of the Marketing Communication Process focuses on understanding the external and internal environment through methods such as SWOT analysis, competitive intelligence, and trend analysis. Traditionally, this phase is resource-intensive, requiring comprehensive market research and manual data processing. The AI Tool Microsoft Power BI provides robust data visualization capabilities and seamless Integration with Microsoft products, though it requires expertise in data structuring for more complex analyses. Brandwatch excels in social sentiment tracking and competitor analysis but is cost-prohibitive for smaller organizations and lacks offline media tracking capabilities (Hayes et al., 2020, pp. 8–12; Andezion, 2024, pp. 45–50; Olubiyi et al., 2024, pp. 16–19). Mixpanel delivers advanced behavioral analytics for tracking user engagement but offers limited flexibility when integrating non-digital data sources (Grunert, 2019, pp. 72–75; Idrus et al., 2022, pp. 10–13). Google Analytics AI (GA4) is a powerful, free tool for website and app performance tracking, though its interface can be complex, requiring technical expertise for customization (Wesselmann, 2020, pp. 34–37; Idrus et al., 2022, pp. 10–13; Conti & Messinese, 2024, pp. 22–27). Lastly, SEMrush provides comprehensive SEO and marketing research tools, but its steep pricing and complexity may present challenges for novice users (Conti & Messinese, 2024, pp. 22–27; Mickleit & Forthmann, 2023, pp. 19–24). Analysis can be done automatically and in seconds by AI when the input data is complete. Then the analyzed data is being cleaned, clustered, and visualized (Gonçalves et al., 2023, pp. 30–34). Further AI-driven predictions can be made. Still, this data needs validation from a human expert to check its relevance and accuracy.

4.1.2 Strategic Planning

Strategic planning in marketing communication involves formulating objectives, developing personas, and setting up roadmaps for brand positioning and communication strategies. In this stage, the following AI tools offer solutions. Mixpanel excels in advanced behavioral analytics for tracking user engagement, though its flexibility is limited when integrating non-digital data sources (Grunert, 2019, pp. 113–115; Idrus et al., 2022, pp. 12–14). Miro AI stands out for enhancing collaboration through AI-powered suggestions and templates, but it may lack the depth required for more specialized use cases (Miro AI | Miro, n.d.; Kirst, 2023, pp. 44–46). HubSpot integrates seamlessly with CRM systems, offering a comprehensive suite of marketing, sales, and customer service tools, like a tool guide to

create Personas, yet its pricing structure can be a barrier for smaller organizations (HubSpot, 2024, pp. 23–25). Daydrin AI is effective in generating creative advertising ideas and copy, but its outputs may lack originality and often require human refinement to meet high-quality standards (Swant, 2023, pp. 7–8; Church, 2024, pp. 17–18). In this regard, the tools support outperforming strategic planning with templates, clustering of information, and giving advice, but the AI still relies on the insights of the input data, which heavily influence the output.

4.1.3 Operational Planning

In the operational planning phase, the focus shifts to the tactical aspects of executing a marketing campaign, such as project management, content creation, and resource allocation. AI tools like Copy.ai, Grammarly, and Jasper AI illustrate how AI can simplify these tasks by automating workflow management and generating content for marketing communications. Canva has an extensive amount of design templates with features of text-to-image, style and text suggestions, as well as image editing, though it offers limited customization for advanced design professionals and reliance on standardized templates (Mickeleit & Forthmann, 2023, pp. 19-22; Workman, 2024, pp. 11-14). Copy.ai and Jasper AI excel in automating content creation, making them valuable for marketing and creative tasks; however, their outputs can sometimes be repetitive or lack the nuanced creativity of human input (Marquis et al., 2024, pp. 27-29; Telebenieva, 2024, pp. 15-18). Grammarly provides reliable grammar, punctuation, style suggestions, and text generation, but it may misinterpret complex contextual nuances in writing (Mickeleit & Forthmann, 2023, pp. 22-24; Wu et al., 2023, pp. 34-36). Hootsuite AI optimizes social media scheduling and engagement with its analytics-driven recommendations, but its integration with niche platforms can be limited, and premium features may be cost-prohibitive (Lammenett, 2024, pp. 48-50). This shift from manual to AI-powered operations enhances efficiency and time savings, demonstrating that AI can serve as a practical and scalable solution in this phase of the Marketing Communication Process. Nevertheless, these AI tools can lack creative flair or original thinking and may not consistently create truly innovative or emotionally resonant content. Even if AI can automate workflows, it struggles to replicate the collaborative and dynamic human elements of operational planning. Creative brainstorming sessions, problem-solving discussions, and negotiating between stakeholders are human tasks that cannot be replaced by automation (Shaji & Manivasagam, 2024, pp. 60-62).

4.1.4 Implementation and Creation

The implementation phase of the Marketing Communication Process, which involves the actual creation of marketing materials and their deployment, has traditionally relied heavily on creative agencies for tasks like design, content creation, and campaign execution. AI tools such as Midjourney and Runway ML, or Canva challenge this paradigm by enabling marketers to generate high-quality visuals and written content through AI-based creative solutions. Furthermore, AI platforms like Adobe Creative Cloud, which include examples like Adobe Sensei and Adobe Firefly, are increasingly being used by marketers to automate design tasks, from photo editing to video production, that were once the exclusive domain of skilled human designers. These tools offer cost and time efficiency by automating complex creative processes while maintaining a high standard of quality, thus requiring a steep learning curve and significant cost for full utilization (Angelova, 2024, p. 12; Hartmann et al., 2024, pp. 45-47). Midjourney and Stable Diffusion harness AI to generate high-quality images from textual prompts, excelling in creative visual generation but sometimes lacking nuanced customization for highly specific artistic goals (Oppenlaender, 2023, pp. 28-30; Akhtar, 2024, pp. 19-21; Lammenett, 2024, pp. 41-43; Shamaeva, 2024, pp. 50-53). Runway ML simplifies video editing and content creation through AI-powered tools, such as background removal and automated effects, but it offers fewer advanced features compared to traditional professional software (Gozalo-Brizuela & Merchan, 2024, pp. 806-808). Hootsuite AI uses AI to optimize social media scheduling, analyze audience engagement, and provide content recommendations, though its integration with niche platforms remains limited (Lammenett, 2024, pp. 15-18). Shai Creative applies AI for branding and storytelling by generating innovative concepts, but outputs often require human refinement to align with specific creative objectives (Shai Creative, 2024, p. 22). Lastly, Canva incorporates AI to suggest design templates and automate tasks like resizing and color matching, making it highly accessible but less suitable for advanced, custom professional projects (Mickeleit & Forthmann, 2023, pp. 88-91; Workman, 2024). AI-powered design tools demonstrate the ability to compete with and occasionally replace human-driven creative processes, particularly in generating multiple content variations quickly and efficiently. However, these tools often lack the cultural sensitivity, emotional depth, and intuition necessary to create truly original and innovative ideas. Human designers bring unique creativity that AI cannot replicate due to its algorithmic constraints. Additionally, AI-generated content may raise concerns around intellectual property, plagiarism, and copyright infringement, necessitating

human oversight to ensure compliance with legal standards and alignment with brand objectives (Basha, 2023, pp. 99-101).

4.1.5 Monitoring and Evaluation

The final phase of the Marketing Communication Process is focused on monitoring the performance of campaigns and evaluating their effectiveness through data analysis and reporting. Traditionally, this phase required marketers to manually collect and analyze performance metrics. AI tools have now automated these processes, providing real-time insights, predictive analytics, and comprehensive performance evaluations based on machine learning algorithms (Wasnik, 2019, p. 87). Google Analytics AI (GA4) for example is a powerful, free tool for tracking website and app performance, offering predictive analytics and user insights, though its complex interface and limited customization options can pose challenges for less experienced users (Wesselmann, 2020, pp. 102-104; Idrus et al., 2022, pp. 67-69; Conti & Messinese, 2024, pp. 34-36). Mixpanel excels in providing advanced behavioral analytics for user engagement tracking but lacks flexibility when integrating non-digital data sources (Grunert, 2019, pp. 45-48; Idrus et al., 2022, pp. 72-74). Hootsuite AI streamlines social media scheduling and engagement through AI-driven analytics and recommendations, yet it may struggle with integration into niche platforms and can be cost-prohibitive for smaller organizations (Lammenett, 2024, pp. 295-296). The use of AI tools for social media analytics, as exemplified, further supports the claim that AI can not only replace traditional monitoring methods, but also provide more sophisticated, data-driven insights to inform future marketing strategies. Whereby it must be considered that AI can identify trends in engagement or conversion rates but might miss the underlying reasons for consumer preferences or dissatisfaction, finding in emotions and behaviors. The data could also be incomplete or flawed, which will create inaccurate outputs and may raise significant concerns about privacy, security, and data ethics, if the large amounts of user data gathered are not managed responsibly (Kaplan & Haenlein, 2019, pp. 55-57). As the previously named tools focus on specific tasks and areas the following AI tools have a holistic approach and can be used to outperform every of the mentioned stages. The following Table 6 shows the three holistic tools ChatGPT from OpenAI, Google Bard from Google and Microsoft's AI technology Copilot (Marquis et al., 2024, pp. 52-54). These can be implemented and used in the whole Marketing Communication Process, while having different strengths and weaknesses.

4.1.6 Holistic AI Tools

Holistic AI tools that support the Marketing Communication Process

Holistic	AI Tools	AI Functions
Applicable to all stages of the MarCom Process	ChatGPT	Natural Language for wide range of usage for conversational creative tasks
	Google Bard	Creating answers to conversational topics by sourcing real time information of the google data base
	Microsoft Copilot	Automating tasks, sourcing and analyzing data within the Microsoft Suite

Table 6: Holistic AI tools that support the Marketing Communication Process. Own creation.

ChatGPT is an NLP with a user-friendly interface handling natural language and contextual understanding. In terms of Marketing, it can respond to various queries to create drafts, ideas, or content and thereby enhances productivity and creativity across diverse fields. Additionally, it can enhance texts, suggest keyword-rich content, and create content based on trends and segmentations (Meister, 2023, p. 17; Mickleit & Forthmann, 2023, pp. 56-57). A downside is that due to the high complexity of this holistic interface and its huge database, ethical and data privacy concerns, as well as outdated or incorrect data, can lead to misinformation or undesired outcomes (Marquis et al., 2024, pp. 34-36; Rossetini et al., 2024, p. 3).

Microsoft's Copilot integrates with Microsoft's Bing search engine and Edge browser, utilizing OpenAI's GPT-4 model to provide tasks, such as content creation, coding assistance, complex problem-solving, and real-time information retrieval. This AI Tool is particularly notable for its connectivity to current web data and user-friendly experience due to its seamless integration with Microsoft's platforms. However, like other AI-driven tools, Copilot must navigate challenges related to data privacy, information accuracy, and ethical implications due to potential biases (Marquis et al., 2024, pp. 42-43; Rossetini et al., 2024, p. 4).

Google Bard emerged from a search engine into an AI Tool by enabling natural, text-based dialogues, providing contextual and interactive answers to complex user queries, utilizing Google's vast data resources to generate more dynamic responses compared to traditional search engines. Bard's applications span information retrieval, creative content generation, educational support, and customer service assistance, reflecting its versatile potential across personal and professional domains. While Bard's integration with Google's data enables up-to-date and contextually relevant answers, the accuracy and reliability of responses can vary based on query complexity, highlighting a need for critical evaluation. Its reliance on web-sourced data presents challenges in data privacy and potential biases (Akhtar, 2024, pp. 29-30; Marquis et al., 2024, p. 39).

4.1.7 Summary of AI Tools in the Marketing Communication Process

Overall, the findings indicate that the Marketing Communication Process can be fully automated through the application of AI tools. For each model and process step within Marketing Communication Process, there exist both general-purpose and specialized AI tools capable of replacing complete or specific components. However, determining the appropriate tool requires careful consideration to ensure alignment with the intended output and objectives. Notably, each AI tool necessitates a certain amount and quality of input data to generate effective results, with some tools having specific prompt requirements to function optimally. Consequently, prior to the adoption of AI tools in place of traditional processes, it is advisable to conduct a thorough examination of available tools, ideally through testing, to ascertain the best-suited options for the particular task and to understand the input and prompt specifications necessary for optimal results. This analysis underscores the wide range of tools and technologies available to automate certain process steps. Nonetheless, acquiring proficiency in selecting and utilizing these tools effectively remains essential.

Additionally, it is important to note that this overview does not yet provide insights into the relative efficiency, ease, or speed of AI tools compared to traditional non-AI solutions, nor does it address the skill levels required for their operation or a comparative assessment of costs. As the technologies and the tools are continually evolving, they must be reviewed regularly, while updates and new features can maximize their potential in the marketing process. Further, investing in training and support helps to effectively utilize these AI tools, ensuring you fully leverage their capabilities.

4.2 Hypothesis 2 – Application and Assessment on AI Tool Usage

The following parts show the results of the expert interviews, which findings were clustered in the named structured:

- Effectiveness: Does AI yield results comparable to or better than traditional methods?
- Efficiency: Does AI speed up the process?
- Quality of outcome: How is the Quality of the generated work?
- Substitution Potential: Can AI replace human-driven work or agency-driven tasks?
- Limitations and Risks: Are there obstacles or risks to full AI adoption?
- Skills and Knowledge: What skillset and knowledge is needed to create desired results?

4.2.1 Effectiveness

AI tools demonstrate substantial capabilities in generating outputs comparable to traditional methods, particularly for specific tasks such as content generation, persona creation, and ideation, as well as acquiring foundational understanding or insights. For example, one expert noted that AI tools like GPT can assist in brainstorming ideas for a marketing campaign, or support by generating a 30-day content master plan (See appendix 7.5, 7:25). Similarly, the use of AI in persona creation was highlighted, with tools enabling segmentation and demographic targeting, providing a foundation for strategic planning (See appendix 7.5, 6:43). When it comes to creativity and originality of content, most experts do not receive AI as more creative, but it can accelerate and enhance initial human ideas or give thought-provoking impulses (See appendix 7.2, 17:19; 7.8, 9:55). However, despite these strengths, the experts emphasized the need for human refinement to ensure the quality and alignment of AI-generated outputs with branding and strategic goals. An expert remarked, “AI tools help you achieve the answer faster, [...] but you still need to filter the information with human intelligence” (See appendix 7.5, 9:01). While AI supports creativity, its reliance on structured prompts and human validation limits its ability to function autonomously in more nuanced tasks (See appendix 7.4, 3:04). It can be concluded that the effectiveness depends on the use case. AI can take you in unexpected directions, but the quality often hinges on how well the prompt is crafted, therefore AI effectiveness varies significantly based on the user's input and intentions (See appendix 7.6, 5:34).

4.2.2 Efficiency

AI tools significantly enhance efficiency, particularly in the early stages of campaign planning and execution. Experts frequently highlighted the time-saving potential of AI for tasks such as creating mood boards, drafting content, and upscaling images (See appendix 7.4, 9:10; 7.6, 3:31; 7.8, 26:09). One participant shared, how fast and easy image creation can be done by AI when using the workflow of generating 10 images by Midjourney with the instructions and prompts given by ChatGPT (See appendix 7.7, 26:41). Similarly, tools like Topaz Labs streamline technical processes, transforming low-resolution assets into high-quality visuals in a matter of minutes (See appendix 7.7, 16:24). While the efficiency gains are undeniable, the experts pointed out that the time required for perfecting AI outputs often offsets these benefits (See appendix 7.4, 11:19). For example, two experts stated, that non-AI approaches “can achieve comparable results, but the process might take longer with AI-only workflows” (See appendix 7.6, 22:25; 7.7, 18:18). This suggests that while AI expedites repetitive or basic tasks, its role in achieving final outputs remains supplementary.

4.2.3 Quality of AI-Generated Outputs

The quality of AI-generated outputs was assessed as generally high, particularly for tasks such as generating consistent visuals and textual content. An expert noted, “Mood boards generated by AI can maintain consistent styles if the inputs are well-defined” (See appendix 7.7, 12:20). However, recurring issues with specific details, such as anatomical errors in visuals or overly generic text, were frequently mentioned (See appendix 7.4, 19:02; 7.3, 17:08; 7.5, 13:06). As one expert observed, “Midjourney generates visuals with high-quality aesthetics, but minor details like hands often require correction” (See appendix 7.7, 6:49). Importantly, the experts emphasized that while AI can create high-quality drafts, it lacks the strategic depth and creative nuance required for complex tasks (See appendix 7.3, 42:28; 7.2, 22:37). An expert said, that “AI can achieve a strong baseline quality, yet it struggles with creative flair and subtleties that often distinguish truly memorable campaigns” (See appendix 7.6, 08:24). An expert stated, “The last 10% of perfection still requires human fine-tuning” (See appendix 7.2, 17:19), highlighting the indispensable role of human oversight.

4.2.4 Substitution Potential of AI in Agency-Driven Work

The hypothesis that AI could fully substitute agency-driven work was critically evaluated by the experts. While AI was acknowledged as a transformative tool, its ability to replace human creativity and strategic oversight was consistently challenged. One participant succinctly noted, “AI is not ready to replace agencies entirely; [...] human expertise is crucial to avoid errors and refine outputs” (See appendix 7.5, 21:48). It was also noticed that the quality of AI output is “inconsistent” (See appendix 7.2, 37:41) and can lack creativity and authenticity as “creative control is often still missing” (See appendix 7.3, 18:33). AI is usually seen as a very good way to realize drafts and first ideas, but it is pointed out that final results need human input to ensure the required precision and creativity and a certain style or quality (See appendix 7.4, 19:34; 7.7, 17:54; 7.5, 13:06). AI tools were seen as particularly valuable for automating repetitive or standardized tasks, but their inability to fully understand brand-specific nuances and creative direction limits their substitution potential. For example, another expert remarked, “Combining human intelligence with AI ensures better creative direction and avoids over-reliance on machine outputs” (See appendix 7.5, 22:31). This underscores the complementary rather than substitutive role of AI in marketing processes.

4.2.5 Limitations and Risks of AI Adoption

The limitations and risks associated with AI adoption were a recurring theme in the interviews. Experts frequently cited the inconsistency of AI outputs and the need for extensive trial and error. One participant observed, “AI outputs often miss nuanced details, [...] requiring significant trial and error for optimal results” (See appendix 7.7, 18:45). Additionally, the limited flexibility of AI tools in incorporating custom branding elements, such as logos or text, was highlighted as a critical shortcoming (See appendix 7.7, 28:12). Data privacy and security were also identified as significant concerns. In corporate environments, strict data protection policies often restrict the use of certain AI tools. For example, an expert explained, “Data privacy concerns restrict the use of tools like ChatGPT in corporate environments” (See appendix 7.5, 29:13). These factors present substantial barriers to the full-scale adoption of AI in marketing processes.

4.2.6 Skills and Knowledge Required for Effective AI Use

Some of the experts mentioned that the barrier to use AI is not high, when you are open to try and use it (See appendix 7.2, 47:50; 7.8, 28:11). Whereas, mastery of AI tools requires specific skills, particularly in prompt engineering to be able to achieve valuable results (See appendix 7.7, 35:48; 7.3, 29:31; 7.5, 16:47). Experts emphasized the importance of crafting precise and context-rich prompts to optimize AI performance. One participant shared, “Prompting is critical; specifying who or what AI should emulate can dramatically improve results” (See appendix 7.7, 35:48). Training and hands-on experimentation were also seen as essential for building proficiency, with experts describing the learning process as iterative and time intensive (See appendix 7.7, 38:24). One expert summarizes the required level of skills and knowledge as follows: “You can jump right in with most AI platforms, but truly harnessing their power takes practice and a good grasp of prompt techniques” (See appendix 7.6, 12:36).

With the information received throughout the interviews, the hypothesis (H2) is disproved. Although the opinion about the efficiency and speed of generating data and receiving information is uniformly very positive. Besides, it is mentioned that working with AI tools is “more efficient and faster, especially with texts.” (See appendix 7.4, 9:10). When overseeing the whole process, AI is useful for generating drafts, brainstorming, and visualizing ideas, as well as analyzing and monitoring data at speed. On the other hand, AI needs support and the necessary input during the development process in order to get close to the desired result, as “Success with AI tools depends on the quality of input materials.” (See appendix 7.7, 37:06). To achieve satisfactory results, it is unavoidable to gain knowledge and skills in Prompting within the different AI tools, to brief precise prompts for generating the desired output. Typical agency work could therefore be partially eliminated or replaced by AI tools, although this could lead to new areas of responsibility with regard to the generation of suitable prompts or AI output, which would tend to change agency tasks internally. In addition, it is currently not possible for AI tools to operate a complete Marketing Communication Process exclusively and without human input, which is why human support with the necessary skillset is required, which could be part of new agency work.

4.2.7 Summary of Expert Interviews to AI Usage

To summarize, it can be said that “AI can be used throughout the process from idea to end product [...] but never fully autonomously” (See appendix 7.2, 21:45) and that “It’s a hybrid approach,” meaning “AI complements human efforts but cannot fully replace manual refinement yet.” (See appendix 7.7, 18:18). When especially looking at creative agencies, it seems that the way of working will change, which means that “Humans won’t be replaced, but their tasks will change.” (See appendix 7.3, 21:18). Repetitive tasks, small, easier, and not elaborated tasks can be done well and completely by AI (See appendix 7.2, 22:37; See appendix 7.2, 41:28). The strength of creative agencies, which will remain and most likely cannot be replaced by AI, is the creativity and generation of original and authentic ideas (See appendix 7.7, 24:25; See appendix 7.8, 35:39).

Finally, AI tools can completely take over repetitive and simple or small tasks, but when it comes to original idea generation and the elaboration and improvement of marketing material, human strategic and creative control and human handwriting are necessary to create a final product that meets the requirements and wishes. Apart from this, risks, which include copyright uncertainties, fake news, false information, and ethical challenges, must be taken seriously to overcome legal consequences (See appendix 7.2, 38:45; See appendix 7.8, 38:00). In conclusion, the use of AI tools is a “collaboration between AI and humans” (See appendix 7.8, 22:58), which together leads to a more efficient outcome.

4.3 Hypothesis 3 – Comparative Analysis of a Non-AI versus an AI Approach

The comparison of workflows for creating marketing assets highlights significant differences and similarities between traditional non-AI processes and AI-assisted approaches. The analysis underscores the transformative potential of AI in streamlining production while maintaining a complementary role for human expertise in critical areas.

4.3.1 Comparing the efficiency of a non-AI versus an AI Workflow

The state of the efficiency of the non-AI compared to the AI guided workflow for the FC. ST Pauli Home Jersey Campaign is presented as an extract in figure 4, to create an understanding of how those time and cost variables have been listed. The comprehensive table with all three parts of the production are attached in the appendix, whereas the detailed numbers and exact costs of the non-AI workflow are not shown, to ensure the confidentiality of internal and external business information (See appendix 7.9).

	NON-AI		AI		
	Time	Cost	Time	Cost	
	305	77,483.00 €	107	20,530.00 €	
Pre-Production	131	27,891.00 €	68	16,240.00 €	
Creative Planning					
Sample Order	5	Exact numbers can not be shown	/ = Not Needed		
Deliverables List	2		/ = Not Needed		
Unpacking and assorting Samples	4		/ = Not Needed		
Define Models and Talents	5		5	550.00 €	
Product Assortment Overview	6		/ = Not Needed		
Creative Concept	16		10	1,100.00 €	
Create and share Briefings for Crew	2		/ = Not Needed		
Product Shots	/ = Not Needed		2	220.00 €	
Talent and Model Stills	/ = Not Needed			8,000.00 €	
Reference Styles	/ = Not Needed		3	330.00 €	
Compositions	/ = Not Needed		2	220.00 €	
Production Planning					
Producer (incl. Travel / Insurance)	60		/ = Not Needed		
Location (incl. scouting)	5		/ = Not Needed		
Set Design	3		/ = Not Needed		
Props	4		/ = Not Needed		
Bookings	2		/ = Not Needed		
Run of Show	5		/ = Not Needed		
Production Deck	6		/ = Not Needed		
Filename Overview	2	2	220.00 €		
Deliverables List	1	1	110.00 €		
Call Sheets	1	/ = Not Needed			
Cost Estimates	2	2	220.00 €		
Input to teach and feed AI	/ = Not Needed	10	1,100.00 €		
Prompting list	/ = Not Needed	6	660.00 €		
Train and Learn AI	/ = Not Needed	18	1,980.00 €		
Reference and Format Numbers List	/ = Not Needed	3	330.00 €		
AI Tool (Subscription and selection)	/ = Not Needed	4	1,200.00 €		

Figure 4: Efficiency Comparison of a Non-AI versus an AI Workflow for a Marketing Campaign. Own creation.

Looking at the overall time comparison, the AI Workflow demonstrates a marked improvement in time efficiency, reducing the total time required from 305 hours in the non-AI Workflow to 107 hours, representing a 65% reduction. The total costs for the AI Workflow amount to €20,530, compared to €77,483 for the non-AI Workflow, resulting in a 73.5% cost reduction. This improvement is most evident in the Production and Post-Production phases. The production phase can make significant savings in terms of costs by using AI, as production does not have to take place physically. This eliminates high costs for the crew on set, such as for the photographer and light and grip. When using AI, costs arise almost exclusively from the time it takes to prompt and edit the desired results, as well as paying for the software.

Similarly, post-production tasks like resizing and retouching are expedited through AI tools, significantly reducing manual effort due to the automation of repetitive tasks and the elimination of retouching sub-processes. Whereas it already can be noted that there are tasks, especially visible in the post-production phase that cannot be realized by AI. Pillars, like selection, or Feedback rounds contain human tasks that require creativity, human emotion and subjective judgment. Further, specific tasks that require a certain appearance and form, as is usual for recurring, generally used overviews and documents in corporations. In Pre-Production of AI and Non-AI, the creative planning overlaps in creating a creative concept and looking for models and talents. As it is not necessary to order samples, have them produced and sent and unpack them, as they do not have to be physically present time and costs can be pared down. It is sufficient for the AI approach if the apparel or footwear to be shot is available digitally as a free-standing from several angles. Additionally, the AI approach requires several images of the models and talents in order to train the AI so that the result represents the desired person. Reference styles must be scouted out so that the look is clear and uniform later on. When it comes to production planning, we can recognize a similar structure as required tasks differ from non-AI to an AI approach. Time and cost savings when using AI arise primarily from not having to pay for a producer, the shooting location, nor for the props on set. However, time-intensive AI-specific activities, such as training models (18 hours) and generating prompts (6 hours), partially offset these savings.

The AI Workflow introduces unique tasks, such as training AI models, generating prompts, and selecting and subscribing to AI tools. While these tasks add complexity, they replace

numerous manual activities in the traditional workflow. For instance, AI-driven automation eliminates the need for labor-intensive tasks such as props arrangement and set design, demonstrating its capability to streamline operations. Despite the efficiency gains, certain tasks remain consistent across both workflows, emphasizing the continued importance of human input. The findings reveal that while AI significantly enhances efficiency but cannot fully replace human capabilities in certain areas. In addition, to the comparison of time and cost for implementation, the quality of the end results that are created by AI are also considered.

4.3.2 Assessment of Accuracy, Quality, and Flawlessness

Table 7 serves a structured evaluation of the AI-generated results assessing the images created for the Home Jersey Campaign of FC St. Pauli. The table categorizes AI capabilities into three main aspects: Accuracy, Quality, and Flawlessness, each containing specific sub-metrics that measure different aspects of AI performance. By assigning numerical scores on a scale from 1 (low) to 5 (high) helps in identifying strengths, weaknesses, and areas for improvement in AI-generated outputs.

Scoring of AI results – System: low (1) to high (5)

Accuracy	2.9
Face recognition	3.5
Logo Placement	4
Colors	4
Patterns	1
Text	2
Quality	3
Quantity of data	4
Resolution	2
Flawlessness	3
Logo preciseness	1
Look	4
Body	4

Table 7: Scoring of AI results. Own creation.

In terms of Accuracy, the AI demonstrated a general ability to produce faces that were similar or very similar to the reference images. However, exact replication of facial references was not achieved in most cases. A notable limitation emerged when multiple individuals were included in the image. The AI struggled to differentiate between multiple faces, often merging features or producing results that only loosely resembled the intended references. While the proportions of facial features were generally accurate, common issues included heads being cropped or truncated and prompts requesting three individuals occasionally resulting in images with only two people. Regarding logos and text, the AI frequently rendered logos inaccurately, often creating distorted or hybrid designs that failed to replicate the intended input. Text elements, such as words and sentences, were similarly problematic, often appearing incomplete or nonsensical. For jerseys, while the AI could

adjust colors to match the prompt, design elements and brand logos were frequently misrepresented, displaying fictional or altered designs rather than the specified references.

In the Quality dimension, the evaluation considered both the data volume and resolution of the AI-generated outputs. Data volume varied significantly, depending on the preference code provided in the prompt. File sizes ranged from 600 KB to 5 MB, with larger file sizes being achieved when the "Upscale" function was used to enhance and enlarge the image. However, despite the visual appeal of the results, the resolution was insufficient for high-quality printing. Midjourney generated images had a DPI (dots per inch) of 72, far below the 300 DPI required for professional printing. Consequently, these images are more suitable for digital use, such as social media posts, rather than for print materials demanding higher resolution and detail fidelity.

Regarding Flawlessness, logo reproduction was a persistent issue as mentioned. The AI struggled to accurately depict brand logos, often generating incorrect or blended representations. These flaws would necessitate manual retouching to meet professional standards. The workflow was often hindered by the trial-and-error nature of achieving the desired output, significantly increasing the time required for completion. Introducing certain reference codes sometimes led to unexpected alterations in the overall look of the image. Additionally, the AI lacked the capability to replicate specific portions of images that met expectations. Attempts to regenerate desired areas often introduced new inconsistencies, and the lack of user control over specific aspects of the regenerated areas further compounded this issue. While the AI could generate visually appealing results, the lack of accuracy and detail fidelity made the outputs insufficient for tasks requiring precise representation, such as accurately depicting specific players or jerseys with brand-specific designs.

Overall, AI-driven tools show significant potential for generating creative marketing materials but face critical limitations in precision and detail fidelity. Although the outputs provide a good starting point, they often require extensive post-production editing to achieve professional quality. In cases where accurate depiction of specific individuals, jerseys, or brand logos is crucial, the AI outputs proved inconsistent and unreliable. While the efficiency of AI tools in generating a broad range of initial drafts is notable, achieving high-quality,

detailed, and accurate results remains a challenge, particularly for campaigns where brand and design specifics are critical.

4.3.3 Outcomes of the AI Implementation

To create an understanding of the previously evaluation, the following section outlines the detailed process of creating AI-generated images for the Home Jersey Campaign for FC St. Pauli, combining the tool ChatGPT for prompt and text generation and Midjourney and Photoshop for image synthesis.

Example 1

Task: Creating a backdrop that fits the look and feel of the football club FC St. Pauli.

Output with non-AI:



Output with AI tools:



AI tools usage: ChatGPT, Midjourney

Workflow: Using ChatGPT to create ideas for a backdrop that can be used for a Home Jersey Campaign for FC St. Pauli, by inserting creative directions of the global PUMA Guidelines, the Home Jersey of St. Pauli by PUMA, as well as Brand Guidelines and designs of the football club FC St. Pauli. Then, deciding for an idea and elaborating on it, by doing adjustments via ChatGPT. Further, asking ChatGPT to create a prompt with a description of what I should insert into Midjourney to create the wanted outcome. Inserting the prompt and additional tags into Midjourney. Letting Midjourney recreate and vary the images slightly to get diverse images. No reference image was inserted.

Prompt:

Create a visually striking backdrop inspired by a patchwork quilt concept. The scene integrates enlarged jersey patterns and recycled textile designs, blending FC St. Pauli fan artifacts like scarves and banners with eco-friendly, sustainable visuals. The quilt-like set should have a warm and authentic feel, using earthy tones like natural browns, greens, and muted whites. Bold elements of the FC St. Pauli jersey, including RE textures, should be prominently displayed in patches, symbolizing sustainability and innovation. Include subtle graffiti-style details and fan-inspired slogans like "Woven by Tradition, Built for the Future." The setup should be layered, with varying textures (smooth, woven, rugged), giving depth and movement. Use soft lighting with a natural, slightly warm glow to enhance texture contrasts. --ar 5:6 --stylize 50

Example 2

Task: Creating a still of the football player Eric Smith in the 2024/25 Home Jersey of FC St. Pauli from the sports brand PUMA in front of a backdrop with a patchwork quilt concept integrates enlarged jersey patterns and recycled textile designs, blending FC St. Pauli fan artifacts like scarves and banners.

Output with non-AI:



Output with AI tools:



AI tool usage: ChatGPT, Midjourney, Adobe Photoshop

Workflow: Briefing ChatGPT to create a prompt for Midjourney and give guidance for implementation to create the football player Eric Smith from FC St. Pauli in the PUMA Home Kit. The prompt was inserted in Midjourney including three pictures of him as a character reference, as well as the full HOME Kit of FC St. Pauli as an image reference. In order to ensure that the player is presented as authentically and as faithfully as possible, the pictures were recreated several times to vary them subtle and strong. After choosing two outputs that looked similar to the player, the images were inserted into Adobe Photoshop. With the magic tool the background was removed, so that the only the player was visible with no background. Then the previously created background was inserted, as well as the PUMA Kit.

Prompt: Head to toe high quality photography of a football player in a white photo studio with studio light. He is wearing a brown shirt and a brown sport shorts from Puma. He has short blonde hair. He is facing the camera and has a straight look into the camera. --ar 4:5 --style raw --quality 2

Character Reference:



Image Reference:



Example 3

Task 1: Create a claim that fits the campaign

Text output with Non-AI:

Headline: "Step into the Future."

Subline: "Willkommen auf dem Kiez."

Text output with AI:

Headline: "Erste Liga, echter Kiez."

Subline: "Heimtrikot 2024/25."

AI tool usage: ChatGPT

Workflow:

Asking ChatGPT to give me some ideas for suitable claims for the FC St. Pauli Home Kit Campaign by PUMA. Decide which ideas were the best and let ChatGPT elaborate two more times on those and choose one option.

Prompt:

Could you please create some ideas for a claim that would fit to FC St. Pauli and PUMA. There should be a headline and a subline. The Headline should be a short claim. The info that the asset is about the HOME Jersey should be in the subline.

Task 2: Include Text and Logo onto the image

Output with non-AI:



Output with AI:

ChatGPT



Midjourney



AI tool usage: ChatGPT, Midjourney

Workflow:

Inserting the previously created image of the Player Eric Smith in front of the chosen AI backdrop to ChatGPT and Midjourney, asking to take the inserted image and incorporate the claim as well as the Logo.

Prompt:

Please integrate the following font into the attached image. The PUMA logo (Cat Logo) should be integrated in the top right corner and the wording "FOREVER.FASTER." should be at the top left corner. At the bottom left of the picture please put the claim: "Erste Liga, echter Kiez." (Headline) "Heimtrikot 2024/25." (Subline).

Example 4

Task: Creating a still of several hands holding the 2024/25 Home Jersey of FC St. Pauli from the sports brand PUMA in front of a backdrop with a patchwork quilt concept integrates enlarged jersey patterns and recycled textile designs, blending FC St. Pauli fan artifacts like scarves and banners.

Output with non-AI:



Output with AI:



AI tool usage: ChatGPT, Midjourney

Workflow:

Asking ChatGPT to create a prompt to insert in Midjourney, so that it creates an image with the FC St. Pauli Home Kit Jersey, held by several hands in front of the created AI backdrop. Letting Midjourney create several images and vary them strong and subtle.

Prompt:

Create a photography of a two-toned brown football Jersey by PUMA with only one Puma Logo on the right breast and one Patch of the German football club FC St. Pauli (FC ST. Pauli Logo) on the left breast. The Jersey is held by several hands composed in the middle of the picture. The backdrop is visually striking and inspired by a patchwork quilt concept. The scene integrates enlarged jersey patterns and recycled textile designs, blending FC St. Pauli fan artifacts like scarves and banners with eco-friendly, sustainable visuals. The quilt-like set should have a warm and authentic feel, using earthy tones like natural browns, greens, and muted whites. Bold elements of the FC St. Pauli jersey, including RE textures, should be prominently displayed in patches, symbolizing sustainability and innovation. Use soft lighting with a natural, slightly warm glow to enhance texture contrasts. --ar 5:6 --style raw

Reference Image:



5. Conclusion

This research explored the extent to which AI technologies can carry out the Marketing Communication Process and their effectiveness in complementing or replacing traditional marketing communication agencies in terms of efficiency, quality, and creativity. The findings indicate that AI tools, for example, those based on Generative AI and Natural Language Processing, present significant opportunities for innovation. Some aspects of traditional workflows can be substituted by AI, leading to increased efficiency through automation of repetitive tasks.

The key findings of this study show that AI tools are widely available and generally easy to use. They can be classified into holistic tools, which cover multiple functions, and specific tools, designed for particular tasks. The selection of an appropriate AI tool should depend on the desired outcome and the type of media involved. Some AI tools excel in language processing and text generation, while others specialize in music, video, or image creation. Many of these tools function through natural language prompts, allowing users to interact with them intuitively. One advantage of AI in marketing communication is its ability to generate highly realistic images, sometimes resembling specific individuals. AI-generated backgrounds offer endless creative possibilities and cost-saving options, eliminating the need for expensive photoshoots. The ability of AI to automate marketing communication tasks exceeded expectations in some areas, particularly in content drafting and basic visual generation, as AI tools demonstrated remarkable efficiency in generating qualitative outputs in seconds. However AI-generated content, while impressive, often lacked the authenticity and uniqueness necessary for high-impact marketing campaigns. This reinforces the importance of human oversight in refining AI outputs to meet professional standards. Another key insight from this study is the vast diversity of AI tools, many of which are based on similar foundational models, such as GPT-based language models. Despite these similarities, each tool offers distinct features and outputs. Nevertheless, one major challenge is the lack of transparency regarding the data sources behind AI tools, raising concerns about content accuracy and reliability. Additionally, AI-generated ideas tend to be repetitive, particularly when human creative input is minimal. Starting to work with AI tools is relatively simple, as the entry barrier is low, which is mainly due to natural language prompting. Despite this advantages, AI Tool and prompting expertise and skills are beneficial and in some cases required to yield optimal results. Trial and error can refine prompts, but the quality of outcomes heavily depends on the user's ability to provide precise and structured

input. Additionally, knowledge in AI training and fine-tuning models enhances results significantly. Further challenges are, that AI facilitates efficiency but does not fully replace human intelligence in complex creative tasks, whilst AI-generated content must always be verified for accuracy and legal compliance. AI usage is therefore effective for generating drafts, visualizations, and content recreation, but human input remains essential for creativity, authenticity, and quality control. Because even if the skillset is high technical limitations, such as difficulties in generating multiple distinct individuals in a single image, inaccuracies in facial replication, and anatomical inconsistencies, persist. In many cases, AI-generated images failed to match specified facial characteristics accurately and often exhibited distortions in extremities. Further, AI struggles with embedding text into images, limiting its application in branding and logo placement. Furthermore, the resolution of AI-generated images is not yet high enough for outdoor advertising, restricting their professional use.

The rapid proliferation of AI tools in marketing communication highlights the relevance of this research. The sheer number of available tools, combined with a lack of clear guidance on their optimal use, makes it difficult for marketing professionals to navigate the landscape effectively. Given the novelty of AI applications in marketing, structured research on AI tool selection and best practices remains scarce. This has led to a trial-and-error approach among practitioners, further emphasizing the importance of continued academic and industry research. It was an encouraging finding that the sophistication of AI databases enable AI tools to deliver great results rapidly. Still, execution remains a challenge, as AI-generated outputs require adjustments, refinements and human intervention to ensure creativity, coherence, and strategic alignment.

The research question guiding this study aimed to evaluate the extent to which AI technologies can execute the marketing communication process and assess their effectiveness in complementing or replacing traditional marketing communication agencies in terms of efficiency, quality, and creativity. Based on the collected findings, it can be concluded that the integration of AI tools into various workflows within marketing communication presents a valuable enhancement. The broad range of applications and the relative ease with which AI technologies can be incorporated into different stages of the marketing communication process contribute to a significant acceleration of work processes, ultimately leading to increased cost efficiency. However, it is important to acknowledge that

the application of AI technologies is only effective to a certain extent. While AI-driven automation excels in streamlining repetitive tasks and generating initial drafts or mock-ups, it remains insufficient for tasks that require a high level of quality, originality, and creative depth. In cases where marketing outputs extend beyond standardized automation and involve complex, non-repetitive elements, AI is not yet capable of delivering fully satisfactory results. Moreover, effective utilization of AI tools requires specialized knowledge in AI prompting and continuous adaptation to technological advancements. Users must remain up to date with the latest developments and gain familiarity with different AI tools to optimize outcomes. In conclusion, while AI technologies can facilitate certain aspects of the marketing communication process, such as ideation, drafting, initial visualizations, and automation of routine tasks, they do not possess the capability to fully replace human-driven agency work. Instead, the emergence of AI tools fosters a transformation towards a hybrid working model, where human expertise is augmented by AI-assisted processes. Marketing agencies that strategically embrace this shift and develop expertise in AI-driven solutions may benefit significantly, as they can create innovative offerings and establish competitive advantages by integrating AI into their professional services.

5.1 Limitations and Challenges

Several limitations must be acknowledged in this study. While the case study approach facilitated the collection of valuable insights, its scope was confined to a particular sector of the industry, as well as a specific company and agency. This restriction limits the generalizability of the findings and does not provide a comprehensive or cross-industry perspective. Future research should aim to broaden the scope of analysis to achieve a more holistic understanding of AI's impact on marketing communication across various industries and organizational structures. Another significant limitation arises from the study's reliance on expert interviews. While expert opinions provided in-depth and nuanced insights, the relatively small sample size constrains the extent to which these findings can be generalized. The results are shaped by the individual perspectives and experiences of the respondents, making it difficult to draw universally applicable conclusions. Future studies should consider employing a larger and more diverse expert pool or complementing qualitative insights with quantitative methods to enhance the robustness of the findings. Additionally, this study did not extensively explore ethical and legal issues related to AI in marketing communication.

Transparency and data security remain crucial concerns, particularly regarding privacy regulations, copyright protection, and potential biases in AI-generated content. The absence of uniform legal frameworks governing AI-generated media and intellectual property rights presents a challenge that requires further examination. Given the increasing ethical scrutiny surrounding AI applications, future research should investigate the implications of AI-driven marketing communication in greater depth, particularly with regard to regulatory frameworks and responsible AI usage. Furthermore, the rapid evolution of AI technology poses a fundamental limitation to this study. AI-driven tools and algorithms are advancing at an unprecedented pace, which means that the insights and findings presented in this research may quickly become outdated. Technological advancements can lead to new capabilities and challenges that were not accounted for in this study. Future research should adopt a continuous monitoring approach, incorporating longitudinal studies to track developments and reassess AI's impact on marketing communication over time.

5.2 Research Gaps and Future Outlook

This research gave an overview of AI tool in the marketing communication process, further research should delve deeper into each of the tool's application areas and possibilities. While qualitative insights from expert interviews were crucial for this study, they are inherently subjective and context dependent. Future research should integrate quantitative methodologies, such as surveys with large sample sizes, AI performance metrics, and experimental designs, to provide statistical validation. This would allow for more generalizable and data-driven conclusions. AI technologies are evolving at an extraordinary pace, which means that findings from current research may quickly become outdated. Longitudinal studies that track AI adoption, usage patterns, and business outcomes over extended periods would offer deeper insights into how AI's role in marketing communication shifts over time and whether it leads to sustainable improvements or diminishing returns. As this study showcase specific as well as holistic tools, further research could determine whether a single holistic AI platform will emerge, consolidating multiple functions, or whether specialized tools will dominate the market. Additionally, legal and ethical considerations surrounding AI-generated content should be a focus for future studies, particularly in areas such as copyright and data privacy. As AI-generated photo, video, and audio content continues to improve, tracking its advancements and potential applications in marketing communication will be essential.

6. References

- Adobe Experience Cloud Team (2024) *Content Marketing — definition, types, and how to do it*.
<https://business.adobe.com/blog/basics/content-marketing> (Accessed: November 21, 2024).
- AJuhi, A. and Kumar, S. (2020) 'A Survey on Artificial Intelligence Overview,' *Engineering Archive* [Preprint].
<https://doi.org/10.31224/osf.io/47a85>.
- Akhtar, Z.B. (2024) 'Unveiling the evolution of generative AI (GAI): a comprehensive and investigative analysis toward LLM models (2021–2024) and beyond,' *Journal of Electrical Systems and Information Technology*, 11(1). <https://doi.org/10.1186/s43067-024-00145-1>.
- Al-Hasan, T.M. et al. (2024) 'From traditional recommender systems to GPT-Based chatbots: a survey of recent developments and future directions,' *Big Data and Cognitive Computing*, 8(4), p. 36.
<https://doi.org/10.3390/bdcc8040036>.
- Alodia, S., Ramadhanti, S.A. and Hidayati, A. (2023) 'The effect of enjoyment, desire to excel, enduring involvement, and commitment on sport intention to sport product purchase,' in *Advances in economics, business and management research/Advances in Economics, Business and Management Research*, pp. 529–536. https://doi.org/10.2991/978-94-6463-348-1_40.
- Ambert, A.-M. et al. (1995) 'Understanding and evaluating qualitative research,' *Journal of Marriage and Family*, 57(4), pp. 717–732. <https://doi.org/10.2307/353409>.
- Andezion, A. (2024) *Wie KI das Marketing neu definiert*, Springer eBooks. <https://doi.org/10.1007/978-3-658-44992-6>.
- Angelova, N. (2024) *The capabilities of the art-oriented artificial intelligence Adobe Firefly and its visual advantages and disadvantages*. <https://journals.tu-plovdiv.bg/index.php/journal/article/view/868> (Accessed: November 3, 2024).
- Apotheker et al. (2024) *From Potential to Profit with GenAI*, BCG. <https://web-assets.bcg.com/12/b1/8921dcc24e93a36394623a2cb1a5/the-c-suites-ai-agenda-slideshow-jan-2024-new.pdf> (Accessed: July 27, 2024).
- Bae, B.R. and Kim, S.-E. (2023) 'Effect of brand experiences on brand loyalty mediated by brand love: the moderated mediation role of brand trust,' *Asia Pacific Journal of Marketing and Logistics*, 35(10), pp. 2412–2430. <https://doi.org/10.1108/apjml-03-2022-0203>.
- Bagherzadeh, J. and Asil, H. (2018) 'A review of various semi-supervised learning models with a deep learning and memory approach,' *Iran Journal of Computer Science*, 2(2), pp. 65–80.
<https://doi.org/10.1007/s42044-018-00027-6>.
- Basha, M. (2023) 'Impact of artificial intelligence on marketing,' *East Asian Journal of Multidisciplinary Research*, 2(3), pp. 993–1004. <https://doi.org/10.55927/eajmr.v2i3.3112>.
- BCG (2024) *CEO's Guide to Maximizing Value Potential from AI in 2024*, BCG. <https://media-publications.bcg.com/BCG-Executive-Perspectives-CEOs-Guide-to-Maximizing-Value-from-AI-EP0-3July2024.pdf> (Accessed: August 21, 2024).

- BCG (no date) *Generative AI*. <https://www.bcg.com/capabilities/artificial-intelligence/generative-ai> (Accessed: September 6, 2024).
- Benzies, K.M. *et al.* (2006) 'State-of-the-Evidence Reviews: Advantages and Challenges of including grey literature,' *Worldviews on Evidence-Based Nursing*, 3(2), pp. 55–61. <https://doi.org/10.1111/j.1741-6787.2006.00051.x>.
- Berndt, R., Altobelli, C.F. and Sander, M. (2016) *Internationales Marketing-Management*, Springer eBooks. <https://doi.org/10.1007/978-3-662-46787-9>.
- Bjerke, M.B. and Renger, R. (2016) 'Being smart about writing SMART objectives,' *Evaluation and Program Planning*, 61, pp. 125–127. <https://doi.org/10.1016/j.evalprogplan.2016.12.009>.
- Blakely, R. (2024) 'Be nice to your AI — it really does make a difference,' *The Times*, 2 August. https://www.thetimes.com/uk/technology-uk/article/be-nice-to-your-ai-it-really-does-make-a-difference-89ftllnz8?utm_source=chatgpt.com®ion=global.
- Bogner, A., Littig, B. and Menz, W. (2014) *Interviews mit Experten*, Springer eBooks. <https://doi.org/10.1007/978-3-531-19416-5>.
- Borst, F. (2017) 'Content-Marketing: digitale Markenführung mit nützlichen Inhalten,' in Springer eBooks. Springer Gabler. https://doi.org/10.1007/978-3-658-15816-3_21.
- Bousquet, J. and Ertz, M. (2021) 'ESports,' in *Advances in e-business research series*, pp. 1–24. <https://doi.org/10.4018/978-1-7998-7300-6.ch001>.
- Bruhn, M. (2016) 'Grundlagen der strategischen Kommunikation aus Sicht der Marketingkommunikation,' in Springer eBooks, pp. 23–48. https://doi.org/10.1007/978-3-658-04706-1_1.
- Bruhn, M. (2018) *Kommunikationspolitik: Systematischer Einsatz der Kommunikation für Unternehmen*. 9th edn. Vahlers Handbücher der Wirtschafts- und Sozialwissenschaften. <https://doi.org/10.15358/9783800657643>.
- Bruhn, M. and Rohlmann, P. (2022) *Sports marketing*, Springer eBooks. <https://doi.org/10.1007/978-3-658-39122-5>.
- Brynjolfsson, E., Li, D. and Raymond, L. (2023) *Generative AI at work*. <https://doi.org/10.3386/w31161>.
- Chitralekha and Roogi (2021) 'A Quick Review of ML Algorithms,' *International Conference on Communication and Electronics Systems* [Preprint]. <https://doi.org/10.1109/icces51350.2021.9488982>.
- Chui, M., Hazan, E., *et al.* (2023) *The economic potential of Generative AI: the next productivity frontier*, McKinsey & Company. <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier#business-value>.
- Chui, M., Yee, L., *et al.* (2023) *The state of AI in 2023: Generative AI’s breakout year*. <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2023-generative-ais-breakout-year#/> (Accessed: July 30, 2024).

- Chui, M. *et al.* (2024) *The state of AI in early 2024: Gen AI adoption spikes and starts to generate value*, McKinsey & Company. <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai> (Accessed: August 17, 2024).
- Church, N.J. (2024) 'Maintaining your marketing competitiveness through marketing innovations,' *Mercados Y Negocios*, (51), pp. 3–30. <https://doi.org/10.32870/myn.vi51.7713>.
- Conti, A. and Messinese, D. (2024) 'The Selective Tailwind Effect of Artificial Intelligence,' *IE Business School* [Preprint]. <https://doi.org/10.2139/ssrn.4958898>.
- Cutlip, S.M., Center, A.H. and Broom, G.M. (2006) 'Effective Public Relations / Scott M. Cutlip, Allen H. center, Glen M. Broom,' *Pearson Prentice Hall*, 2006(2006), pp. 1–99.
http://opac.library.um.ac.id/index.php?s_data=bp_buku&s_field=0&id=34344&mod=b&cat=3.
- Dahlhoff, H.D. (2014) 'Herausforderungen der „Integrated Communications“ für Kommunikationsagenturen,' in *Springer eBooks*, pp. 1–16. https://doi.org/10.1007/978-3-658-04776-4_26-1.
- Dall-E (2022) *Dall-E 2 prompt book*. <https://dallery.gallery/wp-content/uploads/2022/07/The-DALL%2%B7E-2-prompt-book-v1.02.pdf> (Accessed: August 13, 2024).
- Deveau, R., Griffin, S.J. and Reis, S. (2023) *AI-powered marketing and sales reach new heights with generative AI*. <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/ai-powered-marketing-and-sales-reach-new-heights-with-generative-ai>.
- Dhoni (2023) *Exploring the Synergy between Generative AI, Data and Analytics in the Modern Age*. 0009-0006-7143–5353.
https://d197for5662m48.cloudfront.net/documents/publicationstatus/171558/preprint_pdf/298f6c840def1f093447a60ab1265e49.pdf.
- Duarte, D. and Ståhl, N. (2018) 'Machine Learning: A concise Overview,' in *Studies in big data*, pp. 27–58. https://doi.org/10.1007/978-3-319-97556-6_3.
- Eckhardt, G. and Arvidsson, A. (2015) 'Ad agencies,' *Consumption Markets & Culture*, 19(2), pp. 167–171. <https://doi.org/10.1080/10253866.2015.1079960>.
- Eliot, L. (2024) 'Making use of generative AI to perform energy healing Mind-Body therapy,' *Forbes*, 30 August. <https://www.forbes.com/sites/lanceeliot/2024/08/30/making-use-of-generative-ai-to-perform-energy-healing-mind-body-therapy/>
- Elman, C., Gerring, J. and Mahoney, J. (2020) *The production of knowledge: Enhancing Progress in Social Science*. Cambridge University Press.
- Flinders, M. (2023) *AI in Marketing: How to leverage this powerful new technology for your next campaign?* <https://www.ibm.com/think/topics/ai-in-marketing> (Accessed: July 27, 2024).
- Friborg, O. and Rosenvinge, J.H. (2011) 'A comparison of open-ended and closed questions in the prediction of mental health,' *Quality & Quantity*, 47(3), pp. 1397–1411. <https://doi.org/10.1007/s11135-011-9597-8>.

- Fuchs, W. and Unger, F. (2014) *Management der Marketing-Kommunikation, Springer eBooks*.
<https://doi.org/10.1007/978-3-642-39811-7>.
- Gartner (2024) *Gartner CMO survey reveals marketing budgets have dropped to 7.7% of overall company revenue in 2024, Gartner*. <https://www.gartner.com/en/newsroom/press-releases/2024-05-13-gartner-cmo-survey-reveals-marketing-budgets-have-dropped-to-seven-point-seven-percent-of-overall-company-revenue-in-2024>
(Accessed: June 27, 2024).
- Gentsch, P. (2019) *Künstliche Intelligenz für Sales, Marketing und Service, Springer eBooks*.
<https://doi.org/10.1007/978-3-658-25376-9>.
- Gonçalves, C.T., Gonçalves, M.J.A. and Campante, M.I. (2023) 'Developing integrated performance dashboards visualisations using Power BI as a platform,' *Information*, 14(11), p. 614.
<https://doi.org/10.3390/info14110614>.
- Göring, S. et al. (2023) 'Analysis of appeal for realistic AI-Generated photos,' *IEEE Access*, 11, pp. 38999–39012. <https://doi.org/10.1109/access.2023.3267968>.
- Gozalo-Brizuela, R. and Merchan, E.E.G. (2024) 'A survey of Generative AI applications,' *Journal of Computer Science*, 20(8), pp. 801–818. <https://doi.org/10.3844/jcssp.2024.801.818>.
- Gramp, M., Brandes, D. and Laude, D. D. (2023) *AI study: Over 60 per cent use Artificial Intelligence at work – almost half of all employees are worried about losing their jobs*. <https://www2.deloitte.com/ch/en/pages/press-releases/articles/ai-study-almost-half-of-all-employees-are-worried-about-losing-their-jobs.html> (Accessed: November 4, 2024).
- Grunert, G. (2019) *Methodisches Content Marketing: Erfolgreich durch systematisches Vorgehen, integriertes Arbeiten und klare ROI-Orientierung*. Springer-Verlag.
- Guniversity, S.R. (2024) 'Evolution of automation to hyperautomation: leveraging RPA, AI ML, NLP for optimal operational efficiency,' *International Journal of Computer Trends and Technology*, 72(3), pp. 76–83.
<https://doi.org/10.14445/22312803/ijctt-v72i3p111>.
- Haan, K. (2024) *Content Marketing Statistics for 2024*. <https://www.forbes.com/advisor/business/software/content-marketing-statistics/#:~:text=48%25%20of%20content%20marketing%20is,agencies%20or%20third%2Dparty%20companies>.
- Hairi, E.H. (2023) *9 Frameworks to master ChatGPT Prompt Engineering*. <https://www.linkedin.com/pulse/9-frameworks-master-chatgpt-prompt-engineering-edi-hezri-hairi/>.
- Haleem, A. et al. (2022) 'Artificial intelligence (AI) applications for marketing: A literature-based study,' *International Journal of Intelligent Networks*, 3, pp. 119–132. <https://doi.org/10.1016/j.ijin.2022.08.005>.

- Hansen, K. and Świdarska, A. (2023) 'Integrating open- and closed-ended questions on attitudes towards outgroups with different methods of text analysis,' *Behavior Research Methods* [Preprint].
<https://doi.org/10.3758/s13428-023-02218-x>.
- Harkness, L. *et al.* (2023) *How generative AI can boost consumer marketing*.
<https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/how-generative-ai-can-boost-consumer-marketing>.
- Hartmann, J., Exner, Y. and Domdey, S. (2023) 'The power of generative marketing: Can generative AI reach human-level visual marketing content?,' *SSRN Electronic Journal* [Preprint].
<https://doi.org/10.2139/ssrn.4597899>.
- Hartmann, J., Exner, Y. and Domdey, S. (2024) 'The power of generative marketing: Can generative AI create superhuman visual marketing content?,' *International Journal of Research in Marketing* [Preprint].
<https://doi.org/10.1016/j.ijresmar.2024.09.002>.
- Hayes, J.L. *et al.* (2020) 'Can social media listening platforms' artificial intelligence be trusted? examining the accuracy of Crimson Hexagon's (Now BrandWatch Consumer Research's) AI-Driven analyses,' *Journal of Advertising*, 50(1), pp. 81–91. <https://doi.org/10.1080/00913367.2020.1809576>.
- Helfferrich, C. (2022) 'Leitfaden- und Experteninterviews,' in *Handbuch Methoden der empirischen Sozialforschung*. Wiesbaden: Springer VS, pp. 875–892. https://doi.org/10.1007/978-3-658-37985-8_55.
- Hohenauer, F. (2023) *Toolbox Innovationskommunikation*, Springer eBooks. <https://doi.org/10.1007/978-3-658-43210-2>.
- Holm, N. (2023) *Advertising and consumer society*. <https://doi.org/10.4324/9781003253037>.
- Huang, M.-H. and Rust, R.T. (2020) 'A strategic framework for artificial intelligence in marketing,' *Journal of the Academy of Marketing Science*, 49(1), pp. 30–50. <https://doi.org/10.1007/s11747-020-00749-9>.
- HubSpot (2024) *2024 AI Trends for Marketers*. <https://offers.hubspot.com/ai-marketing> (Accessed: September 12, 2024).
- Idrus *et al.* (2022) *Digital Transformation and Artificial Intelligence in Marketing for Startups Using a Customer Knowledge Management Approach*, ResearchGate. 2579–7298. *International Journal Of Artificial Intelligence Research*. <https://doi.org/10.29099/ijair.v6i1.1.786>.
- International Content Marketing Forum (2021) *ICMF Survey 2021 - Europe's biggest content marketing study*, *Content Marketing Forum*. https://content-marketing-forum.com/wp-content/uploads/2021/02/ICMF_Survey_2020_210107.pdf (Accessed: January 3, 2024).
- Ivanova, J. and Gawenda, A. (2021) *Online-Mediaplanung für Einsteiger*, Springer eBooks. <https://doi.org/10.1007/978-3-658-31212-1>.
- Jeswani, R. (2023) 'The role and importance of social media marketing in brand building,' *Irish Interdisciplinary Journal of Science & Research*, 07(04), pp. 01–09. <https://doi.org/10.46759/ijrsr.2023.7401>.
- Juhi, A. and Kumar, S. (2018) *A Survey on Artificial Intelligence Overview*, *International Journal of Research in Engineering, Science and Management*. <https://doi.org/10.31224/osf.io/47a85>.

- Kaiser, R. (2014) *Qualitative Experteninterviews: Konzeptionelle Grundlagen und praktische Durchführung*. Springer-Verlag.
- Kaplan, A. and Haenlein, M. (2019) 'Rulers of the world, unite! The challenges and opportunities of artificial intelligence,' *Business Horizons*, 63(1), pp. 37–50. <https://doi.org/10.1016/j.bushor.2019.09.003>.
- Kapoor, A. et al. (2024) 'Generative AI Through the Lens of Neo-Schumpeterian Economics: Mapping the Future of Business Innovation,' *Open Science* [Preprint]. <https://doi.org/10.31219/osf.io/khptm>.
- Keras (no date) *Introducing Keras 3.0*. https://keras.io/keras_3/ (Accessed: September 5, 2024).
- Khanom (2023) *View of Using social media marketing in the digital era: A necessity or a choice*. International Journal of Research in Business and social science. <https://www.ssbfnct.com/ojs/index.php/ijrbs/article/view/2507/1765> (Accessed: July 21, 2024).
- Kim, J.J.H. et al. (2024) 'Generative AI can fabricate advanced scientific visualizations: ethical implications and strategic mitigation framework,' *AI And Ethics* [Preprint]. <https://doi.org/10.1007/s43681-024-00439-0>.
- Kirst, N. (2023) *Miro AI: Das Whiteboard füllt sich jetzt von selbst*. <https://page-online.de/tools-technik/miro-ai-das-whiteboard-fuellt-sich-jetzt-von-selbst/>.
- KI-Tools - Portal Digitale Lehre (2024). <https://digitale-lehre.uni-siegen.de/wissensdatenbank/ki-tools/> (Accessed: September 9, 2024).
- Kochhan, C. and Moutchnik, A. (2018) *Media management, Springer eBooks*. <https://doi.org/10.1007/978-3-658-23297-9>.
- Kotler, P. et al. (2022) *Grundlagen des Marketing*.
- Krippendorff (1998) *On Reflexivity in Human Communication, Departmental Papers (ASC)*. <https://repository.upenn.edu/server/api/core/bitstreams/144a2240-b870-4d72-bda9-8338ac005a5a/content> (Accessed: October 14, 2024).
- Kumar, V., Ashraf, A.R. and Nadeem, W. (2024) 'AI-powered marketing: What, where, and how?,' *International Journal of Information Management*, 77, p. 102783. <https://doi.org/10.1016/j.ijinfomgt.2024.102783>.
- Labib, E. (2024) 'Artificial intelligence in marketing: exploring current and future trends,' *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2348728>.
- Lammenett, E. (2024) *Praxiswissen Online-Marketing, Springer eBooks*. <https://doi.org/10.1007/978-3-658-43610-0>.
- Ljepava, N. (2022) 'AI-Enabled Marketing solutions in Marketing Decision making: AI application in different stages of marketing process,' *TEM Journal*, pp. 1308–1315. <https://doi.org/10.18421/tem113-40>.
- Loth, A. (2024) *KI für Content Creation: Texte, Bilder, Audio und Video erstellen mit ChatGPT & Co*. MITP-Verlags GmbH & Co. KG.
- Luber, S. (2023) 'Was ist Generative AI?,' *BigData-Insider*, 15 May. <https://www.bigdata-insider.de/was-ist-generative-ai-a-2ec9ecd5c114d4c94c48ea7092ec45ad/>.

- Marquis, Y.A. *et al.* (2024) 'Proliferation of AI tools: a multifaceted evaluation of user perceptions and emerging trend,' *Asian Journal of Advanced Research and Reports*, 18(1), pp. 30–35.
<https://doi.org/10.9734/ajarr/2024/v18i1596>.
- Marr, B. (2024) '17 Generative AI Data Analytics Tools Everyone should know about,' *Forbes*, 8 August.
<https://www.forbes.com/sites/bernardmarr/2024/08/02/17-generative-ai-data-analytics-tools-everyone-should-know-about/>.
- Meffert, H. *et al.* (2024) *Marketing*, Springer eBooks. <https://doi.org/10.1007/978-3-658-41755-0>.
- Meister (2023) *Chat GPT - Opportunity or danger?* <https://ubtaktuell.uni-bayreuth.de/chatgpt> (Accessed: November 24, 2024).
- Merten, K. (2013) *Konzeption von Kommunikation*, Springer eBooks. <https://doi.org/10.1007/978-3-658-01467-4>.
- Messaris, P. (1997) *Visual Persuasion: The role of images in advertising*. <https://doi.org/10.4135/9781452233444>.
- Mickeleit, T. and Forthmann, J. (2023) *Erfolgsfaktor CommTech*, Springer eBooks. <https://doi.org/10.1007/978-3-658-40169-6>.
- Miro AI | Miro* (no date). <https://miro.com/de/ai/>.
- Mittal, N. *et al.* (2024) *Deloitte's state of generative AI in the enterprise, Quarter Two Report*. <http://deloitte.com/us/state-of-generative-ai>.
- Mogaji, E., Soetan, T.O. and Kieu, T.A. (2020) 'The implications of artificial intelligence on the digital marketing of financial services to vulnerable customers,' *Australasian Marketing Journal (AMJ)*, 29(3), pp. 235–242.
<https://doi.org/10.1016/j.ausmj.2020.05.003>.
- Mohammad, A. *et al.* (2023) *Prompt Engineering: Guiding the Way to Effective Large Language Models*, *Iraqi Journal for Computer Science and Mathematics*. Iraqi Journal for Computer Science and Mathematics.
<https://journal.esj.edu.iq/index.php/IJCM/article/view/1356/321> (Accessed: August 17, 2024).
- Murárand, and Kubovics (2023) *Using AI to create content designed for marketing communications*.
<https://papers.academic-conferences.org/index.php/ecie/article/view/1638/1607> (Accessed: July 18, 2024).
- Nicholas, G. (2020) *Explaining algorithmic decisions*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3523456.
- Nöcker, R. (2014) 'Die Zusammenarbeit zwischen Kunde und Agentur in der Marketingkommunikation,' in *Springer eBooks*, pp. 1–12. https://doi.org/10.1007/978-3-658-04776-4_25-1.
- NVIDIA (no date) *NVIDIA IsaAc ROS (Robot Operating System)*. <https://developer.nvidia.com/isaac/ros> (Accessed: September 5, 2024).
- Olubiyi, I.A., Oyedעי-Oduyale, N.R. and MAdeniyi, N.D. (2024) 'ARTIFICIAL INTELLIGENCE AND THE LAW: AN OVERVIEW,' *ABUAD Law Journal*, 12(1), pp. 1–27. <https://doi.org/10.53982/alj.2024.1201.01-j>.
- Oppenlaender, J. (2023) 'A taxonomy of prompt modifiers for text-to-image generation,' *Behaviour and Information Technology*, pp. 1–14. <https://doi.org/10.1080/0144929x.2023.2286532>.

- Overgoor, G. *et al.* (2019) 'Letting the computers take over: Using AI to solve marketing problems', *California Management Review*, 61(4), pp. 156–185. <https://doi.org/10.1177/0008125619859318>.
- Pallavibhoj (2024) 'Nielsen releases its 2024 Annual Marketing Report surveying global marketers on ROI strategies', *Nielsen*, 25 April. <https://www.nielsen.com/news-center/2024/nielsen-releases-its-2024-annual-marketing-report-surveying-global-marketers-on-roi-strategies/>.
- Pastor, L., Stambaugh, R. and Taylor, L. (2023) *Green tilts*. <https://doi.org/10.3386/w31320>.
- Pastor, L., Stambaugh, R.F. and Taylor, L.A. (2021) 'Dissecting green returns', *SSRN Electronic Journal* [Preprint]. <https://doi.org/10.2139/ssrn.3864502>.
- Patil, A. *et al.* (2024) 'Analyzing the impact and influence of green marketing communication in consumers' green purchase behaviour', *Journal of Informatics Education and Research*, 4(1). <https://doi.org/10.52783/jier.v4i1.562>.
- Pichler, M. and Hartig, F. (2023) 'Machine learning and deep learning—A review for ecologists', *Methods in Ecology and Evolution*, 14(4), pp. 994–1016. <https://doi.org/10.1111/2041-210x.14061>.
- Pluta-Olearnik, M. (2018) 'Integrated marketing communication – concepts, practice, new challenges', *DOAJ (DOAJ: Directory of Open Access Journals)* [Preprint]. <https://doi.org/10.14611/minib.28.06.2018.12>.
- Portal, S., Abratt, R. and Bendixen, M. (2018) 'The role of brand authenticity in developing brand trust', *Journal of Strategic Marketing*, 27(8), pp. 714–729. <https://doi.org/10.1080/0965254x.2018.1466828>.
- Pulizzi, J. (2013) *Epic Content Marketing: How to Tell a Different Story, Break through the Clutter, and Win More Customers by Marketing Less*. McGraw Hill Professional.
- PUMA SE (2023) *PUMA Annual Report 2023*. <https://annual-report.puma.com/2023/en/index.html> (Accessed: August 10, 2024).
- PUMA SE (no date) *Das ist PUMA*. <https://about.puma.com/de/this-is-puma> (Accessed: August 8, 2024).
- Rao, A.S. and Verweij, G. (2017) *Sizing the prize: What's the real value of AI for your business and how can you capitalise?*, PWC. <https://www.pwc.com/gx/en/issues/analytics/assets/pwc-ai-analysis-sizing-the-prize-report.pdf> (Accessed: July 25, 2024).
- Rivas, P. and Zhao, L. (2023) 'Marketing with ChatGPT: Navigating the Ethical Terrain of GPT-Based Chatbot Technology', *AI*, 4(2), pp. 375–384. <https://doi.org/10.3390/ai4020019>.
- Rossetini, G. *et al.* (2024) 'Comparative accuracy of ChatGPT-4, Microsoft Copilot and Google Gemini in the Italian entrance test for healthcare sciences degrees: a cross-sectional study', *BMC Medical Education*, 24(1). <https://doi.org/10.1186/s12909-024-05630-9>.
- Ruisinger, D. (2020) *Die digitale Kommunikationsstrategie: Wege zur nachhaltigen Wertsteigerung*.
- Salminen, J. *et al.* (2019) 'Machine learning approach to auto-tagging online content for content marketing efficiency: A comparative analysis between methods and content type', *Journal of Business Research*, 101, pp. 203–217. <https://doi.org/10.1016/j.jbusres.2019.04.018>.

- Scheufele, B. (2022) 'Kommunikation, Medien und Massenmedien: Grundbegriffe und Konzepte für die Unternehmenskommunikation,' in *Springer eBooks*, pp. 89–123. https://doi.org/10.1007/978-3-658-22933-7_3.
- Scholl, A. (2015) 'Die Logik qualitativer Methoden in der Kommunikationswissenschaft,' in S. Averbek-Lietz and M. Meyen (eds) *Handbuch nicht standardisierte Methoden in der Kommunikationswissenschaft*. Springer-Verlag, pp. 17–32. https://doi.org/10.1007/978-3-658-01656-2_2.
- Schulz (2009) 'Kommunikationsprozess,' in *Fischer Lexikon Publizistik, Massenkommunikation*. Fischer.
- Seebacher, U. (2022) *Reengineering corporate communication, Future of business and finance*. <https://doi.org/10.1007/978-3-031-03838-9>.
- Şenyapar, H.N.D. (2024) 'The Future of Marketing: The Transformative power of Artificial intelligence,' *International Journal of Management and Administration*, 8(15), pp. 1–19. <https://doi.org/10.29064/ijma.1412272>.
- Shai Creative (2024) *SHAI - AI Pre-production - Shai Creative*. <https://shaicreative.ai/>.
- Shaji, M.R. and Manivasagam, Dr.G. (2024) *Human-AI collaboration in creative industries: challenges and success stories, International Journal of Research Publication and Reviews*, pp. 2069–2073. <https://ijrpr.com/uploads/V5ISSUE3/IJRPR23592.pdf>.
- Shamaeva, I. (2024) *Advanced Styles and Insights with Midjourney, Apress eBooks*. <https://doi.org/10.1007/979-8-8688-0336-9>.
- Shrestha, A. and Mahmood, A. (2019) 'Review of Deep learning Algorithms and Architectures,' *IEEE Access*, 7, pp. 53040–53065. <https://doi.org/10.1109/access.2019.2912200>.
- spaCy (no date) *spaCy 101: Everything you need to know · spaCy Usage Documentation*. <https://spacy.io/usage/spacy-101> (Accessed: September 2, 2024).
- Swant, M. (2023) 'Wave of AI-based marketing startups arrives as Microsoft, Google rush AI-based products to market,' *Digiday*, 14 February. <https://digiday.com/marketing/marketing-startups-try-to-profit-as-tech-giants-battle-over-generative-ai/>.
- Telebenieva, Y. (2024) 'DEVELOPMENT PERSPECTIVES AND INNOVATIVE AREAS OF ARTIFICIAL INTELLIGENCE APPLICATION IN MARKETING AND PR,' *Economics & Education*, 9(2), pp. 26–31. <https://doi.org/10.30525/2500-946x/2024-2-4>.
- Timans, R., Wouters, P. and Heilbron, J. (2019) 'Mixed methods research: what it is and what it could be,' *Theory and Society*, 48(2), pp. 193–216. <https://doi.org/10.1007/s11186-019-09345-5>.
- Todorova, G. (2015) 'Marketing Communication mix,' *Research Gate*, 13(Suppl.1), pp. 368–374. <https://doi.org/10.15547/tjs.2015.s.01.063>.
- Tropp, J. (2019) *Moderne Marketing-Kommunikation, Springer eBooks*. <https://doi.org/10.1007/978-3-658-25318-9>.

- Turincio, A. (2024) *PUMA ANNOUNCES BLACKPINK'S ROSÉ AS NEW GLOBAL BRAND AMBASSADOR*.
<https://about.puma.com/en/newsroom/product-and-brand-news/2024/17-06-2024-puma-announces-blackpinks-rose-new-global-brand> (Accessed: August 5, 2024).
- Van Den Bergh, J., De Pelsmacker, P. and Worsley, B. (2023) 'Beyond labels: segmenting the Gen Z market for more effective marketing', *Young Consumers Insight and Ideas for Responsible Marketers*, 25(2), pp. 188–210. <https://doi.org/10.1108/yc-03-2023-1707>.
- Wagner, L. (no date) *ChatGPT-Promptkompetenz*. <https://www.tha.de/ChatGPT-Promptkompetenz.html> (Accessed: September 26, 2024).
- Wasnik, C.T. (2019) 'Machine Learning Techniques: a review', *International Journal for Research in Applied Science and Engineering Technology*, 7(5), pp. 3091–3095. <https://doi.org/10.22214/ijraset.2019.5510>.
- Wesselmann, M. (2020) *Content gekonnt, Springer eBooks*. <https://doi.org/10.1007/978-3-658-24620-4>.
- Wesselmann, S. and Hohn, B. (2017) *Public marketing: Marketing-Management für den öffentlichen Sektor*. Springer-Verlag.
- White, J. *et al.* (2023) 'A Prompt Pattern Catalog to Enhance Prompt Engineering with ChatGPT', *arXiv (Cornell University)* [Preprint]. <https://doi.org/10.48550/arxiv.2302.11382>.
- Workman, J. (2024) *The Power of Canva AI: a game changer in content creation*.
<https://ecampusontario.pressbooks.pub/artificialintelligenceineducationconference/chapter/the-power-of-canva-ai-a-game-changer-in-content-creation/>.
- Wu, H. *et al.* (2023) *ChatGPT or grammarly? Evaluating ChatGPT on Grammatical Error Correction Benchmark*.
<https://arxiv.org/abs/2303.13648>.
- Zamfirescu-Pereira, J.D. *et al.* (2023) 'Why Johnny Can't Prompt: How Non-AI Experts Try (and Fail) to Design LLM Prompts', 19 April. <https://doi.org/10.1145/3544548.3581388>.
- Zerfaß, A. and Volk, S.C. (2019) *Toolbox Kommunikationsmanagement, Springer eBooks*. <https://doi.org/10.1007/978-3-658-24258-9>.
- Zhang, Y. *et al.* (2023) 'The social media industry: where is it heading?', *Journal of Business Strategy*, 45(2), pp. 81–88. <https://doi.org/10.1108/jbs-12-2022-0209>.
- Zver, M.M. and Vukasović, T. (2021) 'Consumers' attitude towards eco friendly textile products', *Tekstilec*, 64(2), pp. 159–171. <https://doi.org/10.14502/tekstilec2021.64.159-171>.

7. Appendix

For the appendix, please refer to additional document.

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