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The Role of Artificial Intelligence in the Future of Work: Insights from the Marketing Field

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ABSTRACT:

Tekoälytyökalut ovat yleistyneet monilla eri toimialoilla. Markkinointi on yksi aloista, joissa tekoälyn käyttöönotto on jo vaikuttanut asiantuntijoiden työprosesseihin. Kehittyneet työkalut ovat tarjonneet markkinoinninalan asiantuntijoille uusia mahdollisuuksia, mutta samalla haastaneet perinteisiä rooleja sekä osaamisvaatimuksia. Tämän Pro Gradu -tutkielman tarkoituksena on tarkastella, miten tekoälyn käyttöönotto muokkaa markkinointialan asiantuntijatyötä sekä mitä vaikutuksia sillä on markkinointityön tulevaisuudelle. Tutkielman keskiössä ovat markkinointityön roolien ja vastuiden muutokset, mahdolliset uudet työtehtävät sekä muuttuvat osaamisvaatimukset. Tutkielma perustuu laadulliseen menetelmään käyttäen puolistrukturoituja haastatteluja, joita toteutettiin 12 kappaletta. Haastateltavat koostuivat eri organisaatioissa sekä työtehtävissä työskentelevistä markkinointialan ammattilaisista, jotka hyödyntävät tekoälyä työssään vaihtelevissa määrin. Näin pyrittiin saamaan laajempi näkemys aiheesta. Haastatteluaineiston analysoinnissa hyödynnettiin Gioia-menetelmää. Tutkielman teoreettinen viitekehys puolestaan perustuu sosiotekniseen järjestelmäteoriaan (Socio-Technical Systems theory), jonka avulla tarkasteltiin, kuinka teknologiset sekä sosiaaliset tekijät vaikuttavat toisiinsa ja kuinka ne yhdessä muovaavat markkinointialan asiantuntijoiden työtä. Tulokset osoittavat, että tekoälyä hyödynnetään jo laajasti erilaisissa markkinoinnin tehtävissä, kuten tekstin luomisessa, käännöksissä, automaatiossa, kuvien ja äänen muokkaamisessa sekä asiakasviestinnässä. Tekoälyteknologian käyttöönotto on vähentänyt rutiininomaisia työvaiheita ja mahdollistanut ajankäytön kohdentamisen strategisiin ja luoviin tehtäviin. Samalla tekoäly on laajentanut markkinointialan asiantuntijoiden vastuualueita sekä mahdollistanut tehtäviä, joita ei ennen ole voinut tehdä. Tulokset osoittavat myös, että työroolit ovat muuttumassa, sillä uusia epävirallisia ja virallisia rooleja on muodostumassa. Osaamisvaatimusten osalta tulokset korostavat erityisesti jatkuvaa itsensä kehittämistä, tekoälylukutaitoa, lähdekriittisyyttä sekä eettisitä harkintaa. Vaikka tekninen osaaminen on entistä tärkeämpää, pehmeät taidot säilyvät keskeisinä. Lisäksi tuloksissa korostuu positiivisen asenteen, kokeiluhalun ja uteliaisuuden merkitys tekoälyn käyttöönotossa. Haastattelujen perusteella markkinointialan asiantuntijat kokevat, että tekoäly ei välttämättä uhkaa koko markkinointityön olemassaoloa, vaan muokkaa sen luonnetta. Tutkielma tarjoaa uutta tietoa siitä, miten tekoäly muuttaa asiantuntijatyötä markkinoinnin kontekstissa. Tulokset laajentavat sosioteknistä teoriaa osoittamalla, kuinka teknologiset sekä sosiaaliset tekijä ovat tiiviisti vuorovaikutuksessa tekoälyn käyttöönotossa ja käytössä. Tutkielma nostaa esiin myös eettisiä kysymyksiä ja asiakkaiden odotusten muutoksia, jotka vaikuttavat alan kehitykseen tulevaisuudessa. Johtopäätöksissä korostetaan tarvetta osaamisen jatkuvaan kehittämiseen sekä valmiutta sopeutua muutoksiin.

KEYWORDS: Artificial Intelligence (AI), The future of work, Socio-Technical Systems (STS) Theory, AI marketing, Marketing, Human-AI interaction

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1 Introduction

The effect of emerging technologies, such as artificial intelligence (AI), is a central topic in today's discussion about the future of work. AI systems that include technologies such as machine learning, natural language processing, robotics and speech recognition (Dennehy et al., 2023) are able to learn, improve and execute knowledge-based tasks that were once considered exclusive to humans (De Cremer & Kasparov, 2021). These tasks, traditionally performed by people, were long believed to be immune to computerization (Wladawsky-Berger, 2017).

In the digital age, AI is expanding beyond its traditional domains such as data analytics, engineering and information technology, and increasingly influencing, for example, the realm of marketing (Mehta et al., 2022). According to a comprehensive analysis conducted by McKinsey & Company, AI has the greatest potential in adding value to areas associated with sales and marketing (Chui et al., 2018). This study reviewed more than 400 AI use cases across 19 industries and nine business functions. Broadly, marketing involves activities aimed at boosting the sales of a company's products or services by creating value for consumers. In order for marketers to succeed in their job, they must comprehend their customers' needs and know how to engage with them (Timoshenko & Hauser, 2019). Hence, marketing consists of activities that enable companies to maintain and enhance customer relationships.

AI's roots in the marketing field can be traced back to early data analytics and machine learning, however, the latest developments have greatly improved its effects and the possibilities it provides (Ma & Sun, 2020). As stated by Chintalapati and Pandey (2022), marketing today relies more and more on data analysis, automation as well as sophisticated intelligence. The technology's ability to process large amounts of data, has provided new opportunities for marketing professionals (Vlačić et al., 2021). A global survey carried out by Salesforce Research in 2022 disclosed that the use of AI among marketers had grown compared to the year 2021 (Kumar et al., 2024). It also revealed that 87% of specialists utilize AI to connect online and offline customer encounters, which represents

a substantial increase compared to the preceding year. Moreover, 87% of marketing experts leveraged AI to accurately address customer identity issues and 88% of professionals applied AI to automate different activities, like reporting. As Kumar et al. (2024) note, the survey results illustrate that the marketing field is increasingly dependent on AI to improve customer experience, operations and overall efficiency.

Existing research suggests that industry experts have high expectations for AI's influence on marketing strategies and customer behavior (Kumar et al., 2024). Marketing functions have adopted AI applications, like chatbots to improve customer service and predictive analytics to forecast consumer behavior (Kumar, 2021). Furthermore, AI has enabled personalized marketing by creating tailored campaigns as well as product and service recommendations (Ameen et al., 2021), which are crucial for the capturing of consumer attention in the information age. Nevertheless, the development of AI has raised questions about the evolving roles of marketing professionals. Will AI succeed at replacing these professionals or augment their abilities leading to a new era of human-machines collaboration?

1.1 Research gap

Despite the increased literature on AI's impact across various industries, a gap remains in understanding its implications on marketing professionals navigating the evolving domain. Research on AI in marketing has gained attention due to its relatively recent emergence and complexity (Kumar et al., 2024). Recent studies in the field examine areas such as AI's role in automation and decision-making (Wedel & Kannan, 2016), personalized engagement marketing (Kumar et al., 2019) as well as customer experience (Ameen et al., 2021). Furthermore, existing studies explore AI's (Kumar et al., 2024) and generative AI's (Kshetri et al., 2024) future development and influence on different marketing activities. Nevertheless, there remains limited research on how these technological advancements are reshaping the roles, skill requirements, and career paths of marketing professionals.

A study that addresses aspects of this gap is Davenport et al. (2020)'s research, which explores AI's impact on marketing as well as its potential to enhance the skills of sales and marketing professionals. Furthermore, the ways AI technologies are likely to influence marketing strategies, customer behavior, and various business models in different industries are explored. Shen (2024), on the contrary, analyzes how AI affects employment and the overall labor market, including job creation and structural changes. They discuss the broader economic impact of AI on employment in various sectors, particularly manufacturing. Nevertheless, these articles do not study how AI is transforming job roles, skill requirements, and work processes in the marketing field. Hence, even though the research papers discuss relevant themes related to this thesis, they do not directly address the main purpose of the study.

Anthony et al., (2023)'s research article is also relevant for this thesis as they observe AI as a collaborator in work environments and highlight the challenges and strategies related to human-AI interactions across various industries. Moreover, Furendal and Jebari (2023) analyze the effects of AI and automation on the future of work, particularly in terms of two situations: labor replacement and labor enabling. The first scenario implies that machines substitute human workers, while the second suggests that collaboration between humans and machines can enhance productivity (Furendal & Jebari, 2023). Neither of these papers, however, study the technology's effects on job roles, responsibilities, skill requirements, and work processes in the marketing domain. Hence, addressing this gap is important, as it provides a deeper understanding of the evolving nature of marketing work and the future role of AI in the field.

1.2 Research question and objective

The objective of this thesis is to examine the impact of AI on the marketing work, focusing particularly on how AI is reshaping job roles, skill requirements, and responsibilities. Furthermore, the aim is to explore the AI tools and technologies that are being

integrated into marketing practices and identify their impact on the future of marketing work. Hence, the following research question has been formulated to navigate the research:

How is the integration of AI transforming job roles, skill requirements, and work tasks in the marketing field, and what implications does this have for the future of marketing work?

To address the research question and define the research scope, this thesis seeks to:

1. Examine how AI is currently being utilized in the marketing field.
2. Assess how AI is altering the traditional roles and responsibilities of marketing professionals.
3. Investigate the emerging skillsets and competencies required to effectively leverage AI in marketing.
4. Assess how marketing professionals foresee the future of marketing with the advent of AI.

By achieving the objectives, this research will contribute to a greater understanding of the connection between AI and the marketing workforce, offering valuable guidance for academia and industry practitioners as they guide the future of work in marketing.

1.3 Structure of the thesis

The thesis is divided into five sections demonstrated in **Figure 1**. The first section focuses on the introduction and research background of the topic. Furthermore, it presents the purpose of the thesis as well as the research question and objectives. The first section is followed by the literature review chapter, which provides a deeper exploration of the relevant theoretical foundations. It begins by examining the concept of AI, including its development and key characteristics, and moves on to discuss the future of work in the

age of AI. Moreover, the literature review section discusses the nature of marketing work, skill requirements and how AI is being utilized within the field. Additionally, the chapter considers the benefits and challenges related to using AI in marketing. The literature review concludes with a theoretical framework that serves as the central foundation for the thesis.

Following the literature review, the third section introduces the research methodology and explains how data is collected and analyzed. The fourth chapter presents the results of the empirical study and offers an analysis of the collected information. Finally, the fifth section concludes the main insights and delivers an answer to the research question. Furthermore, the theoretical and managerial implications as well as future research suggestions and limitations are discussed.

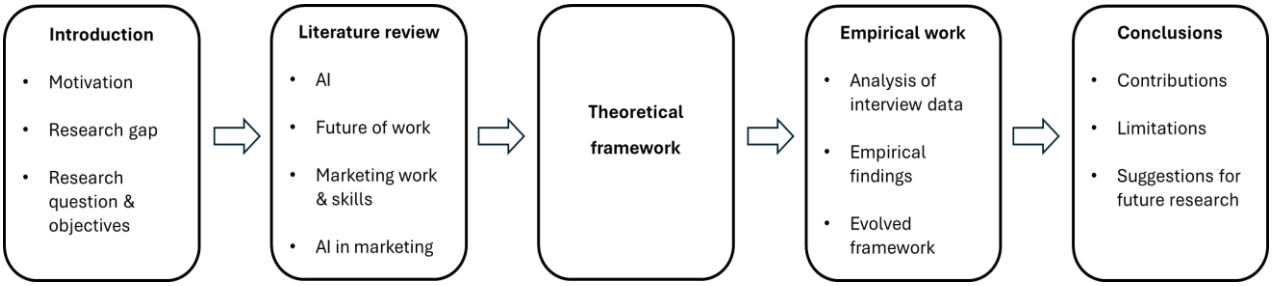

Figure 1. Structure of the thesis.

2 Literature review

This literature review begins with discussing AI and the future of work. These are followed by the examination of the evolving marketing work and the skills professionals need to succeed in their jobs. After this, a comprehensive examination of AI in marketing is provided and the theoretical framework is presented which is the foundation for analyzing how AI is reshaping marketing work.

2.1 Rise of artificial intelligence (AI)

AI and its utilization have recently become a part of daily discussions because its impacts are more extensive and significant than numerous other technological advancements (Vartiainen et al., 2021). AI represents a field within computer science that focuses on developing systems that can execute tasks that typically rely on human intelligence. These tasks involve problem-solving, learning, reasoning and language understanding. According to Davenport (2018), the evolution of AI has been driven by advances in machine learning, neural networks, natural language processing as well as deep learning. These innovations have had an impact on various industries, such as the healthcare industry by improving diagnostics and patient care (Tursunbayeva & Renkema, 2023; Babashahi et al., 2024), the finance industry by automating fraud detection and offering investment recommendations (Ngai et al., 2011; Babashahi et al., 2024), as well as education by providing personalized learning and tutoring possibilities (Babashahi et al., 2024).

AI as a concept is not new. John McCarthy, an American mathematician and computer scientist, organized an academic conference on the topic in 1956 and hence has been considered the first person to introduce the term “artificial intelligence” (Gentsch, 2018). Nevertheless, the idea of machines potentially being able to think had been discussed before McCarthy’s conference by a mathematician called Alan Turing who developed a test called the Turing Test to measure a machine’s ability to perform tasks in a way that

mimics human intelligence (Turing, 1950). The Turing Test, developed in 1950, has subsequently been recognized as a significant milestone in AI's evolution.

While the term AI has existed for a considerable time, it lacks a specific definition. According to Kaplan and Haenlein, (2019), the challenge in defining the concept rises from its varied interpretations and definitions. The Oxford English Dictionary (2024) defines AI as "the capacity of computers or other machines to exhibit or simulate intelligent behaviour". Zhang and Agnihotri (2024) explain that modern AI consists of algorithms that perform tasks traditionally carried out by humans. These algorithms are rooted in machine learning, where the machine identifies patterns from large datasets (Zhang & Agnihotri, 2024). Similarly, Glikson & Woolley (2020) view AI as a technology that aims to mimic humans by adjusting its behavior based on past experiences. Furthermore, Haenlein and Kaplan (2019) describe AI as a system capable of analyzing historical data, deriving insights from it, and applying that knowledge to accomplish certain tasks and objectives. Based on these definitions, AI covers a broad range of interpretations that center on the concept of machines replicating human-like intelligence and learning from data to perform tasks.

According to Kumar et al. (2024), AI is built up of several components that are vital to its functionality. *Natural language processing (NLP)* enables machines to interpret human language which facilitates text analysis and the extraction of insights from, for example, customer engagement (Kumar et al., 2024). *Machine learning*, on the other hand, employs algorithms to analyze data and make predictions without the need for explicit programming. This makes the technology useful for detecting different patterns like fraudulent activities (Kumar et al., 2024). *Neural networks*, in turn, which operate similarly to the human brain, are composed of joint nodes that process data and are commonly applied to identify, for instance, images and voices (Kumar et al., 2024). A more advanced subset of neural networks is *deep learning*, which is able to make accurate predictions by training models on vast amounts of information (Kumar et al., 2024). This capability

is valuable in AI applications that handle unstructured data, such as pictures, texts and sounds.

Huang and Rust (2021) suggest that AI possesses multiple intelligences that replicate human capabilities, specifically in mechanical, thinking, and feeling tasks. Rather than functioning solely as a “thinking machine”, AI can be designed to leverage different forms of intelligence to different types of tasks. Mechanical AI focuses on automating repetitive and routine processes (Huang & Rust, 2021). Thinking AI, in turn, is able to process extensive amounts of information to identify patterns, draw insights and make decisions. This is demonstrated in applications such as text mining, speech recognition, and facial recognition, where thinking AI interprets data in order to deliver results. Machine learning and neural networks are technologies used by thinking AI to support data analysis and decision-making (Huang & Rust, 2021). Emotional AI, or “feeling AI”, is envisioned to connect with humans by understanding and responding to emotional signals. A real functioning feeling AI does not yet exist which is why current systems rely on thinking AI to interpret emotional data and enable human-like interactions (Huang & Rust, 2021).

Huang and Rust (2022) argue that AI differs from other technologies because it is able to autonomously learn and improve its performance over time. This self-learning feature (Huang & Rust, 2018) allows AI to process information for human use and also refine its results without needing further human involvement (Huang & Rust, 2022). In contrast to traditional systems, AI is capable of altering and enhancing its performance through data-driven learning, which allows it to respond to new information and deliver better results (Huang & Rust, 2022). Moreover, it can automate business processes with minimal human involvement and analyze large datasets, encompassing numerical data, text, voices, images, and facial expressions (Davenport et al., 2020; Kopalle et al., 2022), which enables companies to forecast customer purchasing behaviors and deliver tailored digital marketing in real time (Davenport et al., 2020). Together, these features

suggest that AI can automate business operations and simultaneously learn and adapt to improve decision-making.

The fast evolution of AI and its ability to automate processes indicates that it will impact the future of work. This has raised concerns among employees about AI replacing human roles (De Cremer & Kasparov, 2021) and causing job losses (Dennehy, 2020). However, Davenport et al. (2020) note that companies typically leverage AI to improve their employees' abilities instead of replacing them. The World Economic Forum (2020) projects that automation could eliminate 85 million occupations but simultaneously generate more than 97 million new jobs that align better with the evolving distribution of tasks among humans and machines. Moreover, previous studies indicate that a new technology job can generate approximately five complementary roles (Moretti, 2010), which may lead to a transformation in current working methods (Dennehy et al., 2023).

2.2 Future of work in the age of AI

Workplaces are an integral component of the societies in which they operate. They continuously evolve in response to complex and dynamic factors which today often refer to AI, robotics and automation among others. In contrast to previous phases of mechanization that replaced physical labor, AI is now able to execute cognitive tasks, which has led to companies adapting their business structures as well as workforce and skill requirements (Shen, 2024). As AI systems become more common, organizations face the challenge of whether to automate tasks or utilize AI tools to augment human work (Raisch & Krakowski, 2021). Ultimately, this changes job responsibilities and skills requirements so that the benefit of the tools can be fully achieved (von Richthofen et al., 2022; Shen, 2024).

The emerging AI tools have become a central focus of studies and discussions regarding the future of work. Although it is not clear what the future workplaces will look like, the role of AI is increasingly becoming a central component (Kiron & Schrage, 2019). The

technology's influence on global economies is still hypothetical, however, its recent progress, particularly in machine preparation and cognition, has generated optimism about its potential economic impacts in the future (Rock et al., 2017). Unlike earlier waves of mechanization and automation, where machines replaced physical labor, AI systems are now able to replace cognitive tasks (Shen, 2024). Hence, existing research from, for instance, Europe, China and the United States acknowledge that AI is expected to impact all industry sectors (Barton et al., 2017; European Commission, 2018; White House, 2018). As these industries evolve, job roles are anticipated to change (World Economic Forum, 2016). Some roles face the risk of becoming obsolete, while others evolve, for example, in terms of skill requirements.

The adoption of AI within organizations requires companies to decide whether to automate tasks or enhance human work with the help of AI (Davenport & Kirby 2016; Raisch & Krakowski, 2021). Automation refers to machines replacing humans in tasks that were once performed by them, whereas augmentation involves humans collaborating with the machines to complete tasks (Raisch & Krakowski 2021). Existing studies suggest that the probability of automating a task is largely determined by how easily it can be executed using programmed rules and algorithms (Rodriguez-Bustelo et al. 2020). This means that repetitive and predictable tasks are more suitable for automation, whereas tasks that require complex cognitive, social, or emotional interactions with individuals are more likely to need human participation (Frey & Osborne, 2017). Consequently, AI systems are commonly designed to complement human work instead of replacing tasks or entire job roles completely (Nitsch et al., 2024).

The adoption of AI systems is also generating new job roles (Shen, 2024). As an example, von Richthofen et al. (2022) examined a telecommunication company that implemented chatbots for customer service. Initially the company relied on project leaders and business team members to script the chatbot's content, however, as the demands grew, the project leaders hired frontline employees with customer interaction experience. These

employees, previously working directly in customer service, now applied their knowledge to conversational design (von Richthofen et al., 2022).

Increased AI adoption, additionally, requires professionals to acquire new skillsets that allow them to leverage AI tools and technologies (von Richthofen et al., 2022). The World Economic Forum (2020) report highlights the importance of reskilling and upskilling particularly in roles involving digital tools and technologies. Notably, technical skill requirements are not limited to individuals that directly work with AI but also to other members of an organization (von Richthofen et al., 2022). Nevertheless, possessing solely technical skills in today's business environment is no longer enough (Robles, 2012). Workplace changes demand employees to also possess soft skills meaning "personal attributes and interpersonal qualities that are intangible" (Robles, 2012). Soft skills enable people to, for example, work well in teams and communicate effectively with others (von Richthofen et al., 2022). Essentially, soft skills enhance and support technical skills, allowing individuals to better leverage their technical expertise for the benefit of the organization (Wesley et al., 2017).

2.3 Marketing work and skill requirements

As acknowledged, the marketing field has evolved due to changes in economies, consumer behavior and technological advancements. Even though the purpose of marketing has stayed the same, the ways in which it is executed has become more complicated. Masterson et al. (2021) identify two explanations for the term marketing. The first describes it as "the management process which identifies, anticipates and satisfies customer requirements efficiently and profitably" (Chartered Institute of Marketing, n.d.). This implies that active management is important to understand customers' needs (Masterson et al., 2021). The second definition, provided by the American Marketing Association (2017) broadens this scope by describing marketing as "the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large". This definition

extends beyond the company perspective by suggesting that marketing impacts multiple stakeholders (Masterson et al., 2021).

New technologies applied to marketing have required professionals to merge digital skills with traditional marketing competencies. Technology serves as a facilitator of traditional marketing; however, its influence requires marketers to understand digital tools and how they can be used to enhance operations (Harrigan & Hulbert, 2011). Concentrated on a customer-centric approach, Harrigan and Hulbert (2011) emphasize the need for competencies such as digital marketing communication, data mining, analytics, customer relationship management and proficiency in online channels. Brady et al. (2008) also claim that technical capabilities must be developed alongside traditional marketing skills. As a result, traditional and digital expertise are increasingly required in marketing roles. According to Di Gregorio et al., (2019) as technology is applied to traditional marketing professions, entirely new roles emerge.

To navigate the changes, marketers must develop a diverse set of skills. Di Gregorio et al. (2019) identified 29 essential skills, presented in **Table 1**, that marketing professionals should possess to succeed in their careers. These competencies are organized into five key employability skill categories: “basic soft skills, analytical skills, digital and technical skills, core marketing skills and customer insight skills” (Di Gregorio et al., 2019, p. 254). The research highlights that among these skills, soft skills are valued the most by employers and marketing professionals. These competencies include attributes such as taking initiative, working effectively in a team, performing well under pressure, possessing strong verbal and written communication abilities, as well as being motivated and flexible (Di Gregorio et al., 2019).

The second category of skills meaning analytical skills are essential for marketers to collect, analyze, interpret, and present data (Di Gregorio et al., 2019). These skills involve, for instance, understanding data trends, conducting statistical analysis, solving complex problems, and transforming raw data into actionable insights (Di Gregorio et al., 2019).

Moreover, analytical skills enable professionals to visualize complex data in a way that is useful for decision-makers.

As mentioned, the third category, digital and technical competences, have become essential in marketing (Di Gregorio et al., 2019). This category, according to Di Gregorio et al. (2019), consists of skills like understanding e-commerce, social media, analytics and the broader digital landscape. Similarly, Herhausen et al. (2020) emphasized that developing technical skills is important especially in relation to customer data analysis and big data analytics. Specialists, such as marketing analysts, serve as "intermediaries between marketing managers and information technology personnel, or between marketing managers and outside suppliers of data and analytics capabilities" (Wedel & Kannan, 2016, p. 116), implying that marketing specialists are required to possess some technical proficiency in order to utilize the right tools and perform data analysis. Nevertheless, they are not expected to reach data scientists' or IT specialists' levels of expertise. Nevertheless, acquiring technical skills is beneficial as it can foster cross-functional cooperation among marketing professionals and IT specialists (Hafezieh & Pollock, 2018; Kalaignanam et al., 2021).

The fourth category, core marketing skills, focuses more on the organization of marketing tasks instead of having knowledge of specific marketing concepts (Di Gregorio et al., 2019). These competencies comprise of creative thinking to develop tailored content for customer segments, strong organizational and time management capabilities, and a high level of accuracy (Di Gregorio et al., 2019). Furthermore, core marketing skills consist of being able to create content across various channels as well as complete multiple marketing activities simultaneously (Di Gregorio et al., 2019).

Finally, the fifth category is customer insight skills. Since consumers have always been central to the marketing discipline, the identification of customer insight skills as a distinct employability category stresses the need for more than just a customer-centric approach (Di Gregorio et al., 2019). It is essential to utilize customer intelligence to connect

a business and its label with the appropriate audience through effective customer relationship management (CRM). Hence, marketing specialists must know their company, clients and customer touchpoints properly (Di Gregorio et al., 2019). According to Harrigan and Hulbert (2011), developing customer insight skills is a crucial component in fostering connections between organizations and consumers.

In addition to Di Gregorio et al.'s (2019) five skill categories, scholars have encouraged marketing teams to be agile, responsive and creative (Gupta et al., 2020; Kumar et al., 2024). Companies that adapt to AI-driven transformations and commit to continuous learning are best positioned to thrive in the future of marketing (Manyika & Sneader, 2018). Unlike traditional, pre-planned marketing campaigns, marketing agility, as defined by Kalaignanam et al. (2021, p. 38), allows marketers to "quickly identify any initiatives, be able and nimble to execute them, get the feedback, and refine the initiative". Originally developed in the field of software development, the agile approach in marketing enables organizations to adapt to external changes like technological innovations (Gupta et al., 2020). Additionally, it promotes cross-functional collaboration and the incorporation of analytics and data across teams in the hopes to minimize silos in working practices (Kalaignanam et al., 2021).

Table 1. Marketing skills and competences.

Category	Skills	Reference
Basic soft skills	Interpersonal skills Motivation & flexibility Initiative Teamwork Stress resilience Oral communication and presentation skills	Di Gregorio et al. (2019)
Analytical skills	Problem-solving Good analytical skills Statistical knowledge Critical thinking Data-driven / data-oriented Synthesizing data into meaningful and actionable reports	Di Gregorio et al. (2019)
Digital and technical skills	Knowledge of e-commerce Knowledge of social media Knowledge of Internet Knowledge of analytics & software	Brady et al. (2008) Di Gregorio et al. (2019) Herhausen et al. (2020)
Core marketing skills	Content creation Creative thinking Planning, organisation and time management Precision and attention to detail Ability to manage multiple marketing tasks Sales knowledge and management skills	Brady et al. (2008) Di Gregorio et al. (2019) Harrigan & Hulbert (2011)
Customer insight skills	Knowledge of company and customers Knowledge of customer touchpoints CRM and relational skills	Di Gregorio et al. (2019)
Agility	Proactiveness Responsiveness Flexibility Speed	Gupta et al. (2020) Kalaignanam et al. (2021) Kumar et al. (2024)

2.4 AI in marketing

Aa already stated, AI's integration into marketing has grown and there is no end to it insight at least in the near future (Kumar, 2021). The question is no longer whether AI will be part of everyday business operations, but rather how and when it will be fully adopted. AI is transforming productivity across numerous sectors, and as noted by Davenport et al. (2020) as well as Huang and Rust (2021), marketing is among the industries

believed to benefit from it the most. AI brings precision, personalization, and efficiency to marketing (Huang & Rust, 2022), which enables tailored processes that better meet customer needs. However, to achieve the goal of meeting customer need, marketers must navigate the challenges and opportunities related to AI adoption (Kumar et al., 2024).

2.4.1 History of AI in marketing

The tools and technology started gaining traction in marketing in the early 2000s as companies began to explore data mining methods to gain an understanding of consumers' behaviors and expectations. The early applications of AI focused on "customer segmentation, targeting, and positioning" (Kumar et al., 2024, p. 3). Soon after, AI was integrated into email marketing, enhancing the content and sending times of emails, that resulted in higher engagement. As search engines like Google emerged, AI became essential for creating search engine optimization (SEO) and pay-per-click advertising algorithms (Main, 2024). This is when marketing experts began refining keywords for bids, which boosted click rates and visibility (Schwartz, 2022). Moreover, programmatic advertising took off during the mid-2000s, allowing real-time and automated delivery of advertising (Palos-Sanchez et al., 2019).

By the late 2000s, the rise of social media platforms like Twitter and Facebook created new opportunities for AI in marketing (Kumar et al., 2024). Marketers adopted AI-driven tools for sentiment analysis, managing social media platforms and monitoring brand mentions (Kaput, 2024). These strategies allowed companies to understand their customers' opinions and trends better, which enabled them to create more personalized advertising campaigns (Kumar et al., 2024). In the 2010s, AI-powered chatbots with natural language processing and virtual agents revolutionized marketing by making real-time and personalized customer interactions possible (Kaplan & Haenlein, 2019; Verma et al., 2021). Moreover, natural language processing as well as preprocessing tools allowed the conversion of unstructured data like pictures, videos, text and audio into

analyzable formats (Qin & Jiang, 2019; Kopalle et al., 2022). After 2016, AI technologies became more widely adopted in advertising for tasks like advertisement design and copywriting (Qin & Jiang, 2019).

Today, AI has emerged as a driver of modern marketing strategies as predictive analytics can forecast consumer behavior (Haleem et al., 2022) and AI-driven programmatic advertising optimize advertisement placements in real-time with machine learning (Palos-Sanchez et al., 2019). These tools have enabled marketing specialists to react to current trends and anticipate future needs and behaviors (Haleem et al., 2022), while guaranteeing that advertisements are delivered to the appropriate audience at the right time (Huh & Malthouse, 2020). Looking ahead, AI is expected to play a central role in shaping the future of marketing. Improvements in the tools and technology are believed to streamline operations as well as enable better customization and predictiveness (Şenyapar, 2024).

2.4.2 AI applications for marketing

The integration of AI into business operations has enhanced companies' capabilities across many industries (Kumar et al., 2019). For a long time, dynamic capabilities theory has steered organizations aiming to achieve and maintain a sustainable competitive advantage (Teece et al., 1997). Companies possessing these capabilities are believed to be able to innovate and adjust their operations in response to alterations such as customer demand, market conditions and new technologies. According to Agarwal et al. (2021), AI has become a dynamic capability, demonstrating how technology can reshape business operations and strategies.

As stated, AI tools have created several opportunities in the marketing domain (Haleem et al., 2022), which is why their utilization has been researched actively. Recent papers on AI in marketing have been collected into **Table 2.** Huang and Rust (2021) created a multi-stage methodology for strategic marketing planning. The framework demonstrates

how the three AI intelligences, mechanical, thinking and feeling AI, can be applied to marketing research and help create segmentation, targeting and positioning strategies. Furthermore, Haleem et al. (2022) reviewed AI's role in marketing by examining its implementations in different marketing segments and how the tools are altering the industry. Moreover, Kumar et al. (2024) studied the current applications of AI as well as their potential future effects on different marketing processes. Drawing from these and other existing research papers, **Figure 2** highlights some of the most notable applications of AI in marketing discussed in this section.

Table 2. Recent research papers on AI in marketing.

Authors and publishing year	Focus	Conceptual framework
Kumar et al. (2019)	AI in personalized marketing	Conceptualizes personalized engagement marketing as a method that leverages AI to develop, convey and provide tailored offerings to consumers.
Davenport et al. (2020)	AI's impact on marketing	Conceptualizes AI's impact on marketing strategies and customer behavior.
Huang & Rust (2021)	AI in strategic marketing planning	Conceptualizes a three-phase approach to strategic marketing planning that integrates various advantages of AI.
Ameen et al. (2022)	Creativity in AI marketing	Conceptualizes a model that unifies key themes and maps the drivers, characteristics and impacts of creativity in AI-powered marketing.
Huang & Rust (2022)	Collaborative AI in marketing	Conceptualizes collaborative AI in marketing, offering an approach to how humans and AI can cooperate.
Mogaji & Nguyen (2022)	AI in financial services marketing	Conceptualizes AI in financial service marketing, presenting interactions among customers, banks, stakeholders and regulators.
Mariani et al. (2023)	AI adoption in innovation	Conceptualizes the factors influencing AI adoption and its impact on innovation.

2.4.2.1 Marketing research

Huang & Rust (2021) demonstrate how AI can be leveraged for marketing research. Firstly, mechanical AI can be used to automate customer, competitor and market data collection, tracking and sensing. As an example, mechanical AI can gather information

about consumer activities on electronic devices automatically and visualize product usage with the Internet of Things (Huang & Rust, 2021). Moreover, the technology can collect data about customers' beliefs, values and psychographics for market research through surveys and assessments.

Secondly, thinking AI can be used for analytical purposes. Automated text analysis, for instance, is helpful in consumer research as it can identify trends in written content (Humphreys & Wang, 2018), while predictive analytics can forecast market trends and customer preferences (Huang & Rust, 2021). Moreover, thinking AI's natural language processing can aid in noticing connections between users' responses and social media marketing content (Lee et al., 2018).

Lastly, feeling AI enables marketers to better understand their current and potential customers by analyzing emotional data such as attitudes, preferences and sentiments (Huang & Rust, 2021). As an example, feeling AI's sentiment analysis of social media content can provide insights into consumer reactions (Ordenes et al. 2017), and machine learning can be leveraged to identify the factors that affect customers decision-making when they consider different products and services (Dzyabura & Hauser, 2011).

2.4.2.2 Segmentation, targeting and positioning

Another notable AI application in marketing is leveraging it for customer segmentation, targeting and positioning (Campbell et al., 2020; Huang & Rust, 2021; Verma et al., 2021; Kumar et al., 2024). Segmentation involves dividing a market into groups of individuals with shared needs or characteristics. AI can enhance this process through machine learning and data mining as they can detect patterns within data that traditional methods may overlook (Huang & Rust, 2021). Leveraging AI in segmentation allows marketing specialists to classify customers into segments based on more than just demographic or geographic information (Mende et al., 2024). The flexibility that the technology offers makes it possible for marketers to divide markets at a granular level, even down to

individual consumers, or combine smaller niche markets into larger more manageable groups (Huang & Rust, 2021).

An example of AI-driven segmentation is the use of machine learning algorithms to detect consumers' emotions and needs to provide personalized product and service suggestions (Kumar et al., 2024). By processing data such as customer feedback or transaction histories, AI can help categorize consumers based on purchasing behavior and preferences. The technology's ability to uncover hidden patterns (De Bruyn et al., 2020) allows marketers to tailor their strategies. Moreover, as new information is received, AI systems can quickly refine segmentation strategies, keeping marketing relevant (Kumar et al., 2024).

Targeting, in turn, involves selecting the most appropriate market segments for a company and targeting them with the right content (Campbell et al., 2020; Huang & Rust, 2021). AI can automatically divide the market into segments based on data, however, identifying the optimal segments to target requires industry knowledge and intuition. Recommendation engines and predictive modelling can identify potential target segments; however, marketing professionals are often the ones who chose which segments to target based on their knowledge of the industry and intuition (Huang & Rust, 2021). This means that AI is used as a tool that creates suggestions based on which marketers can then make decisions.

Several studies illustrate the effective use of AI in targeting. For instance, statistical analysis combined with data mining can be used to evaluate customers and guide targeting strategies (Drew et al., 2001), whereas machine learning can be leveraged to optimize the targeting of new customers (Simester et al., 2020). Moreover, AI enables the identification of ideal candidates for churn prevention programs (Ascarza, 2018) and analyzes online behavior for profiling digital consumers (Neumann et al., 2019). These AI-driven approaches enable more precise targeting.

Finally, positioning connects product features with customers by establishing a distinctive and favorable perception of the product in the minds of consumers (Huang & Rust, 2021). This is often referred to as brand or advertisement positioning as it focuses on shaping customer perceptions of a company or offering through effective communication. Research by Daabes and Kharbat (2017) illustrates how data mining can be utilized to generate perceptual maps based on customer feedback. This offers an alternative to traditional marketer-driven insights. Unlike segmentation, which is mechanical, and targeting, which is thinking-based, positioning is more emotionally driven, aiming to appeal to consumers' feelings (Huang & Rust, 2021). It is often conveyed through a positioning statement or slogan in marketing communications. Good positioning statements enable products to secure a lasting presence in the market by appealing directly to customers' emotions. AI tools that focus on emotional analytics are suited for developing positioning strategies because they analyze what resonates emotionally with the targeted customers (Huang & Rust, 2021).

2.4.2.3 Customer service

AI is also increasingly being applied to customer service. Today's technologically advanced landscape requires a deep comprehension of customers' needs and preferences (Kumar et al., 2024). An AI application used in customer service is conversational AI, which refers to AI systems that can mimic human interactions through text or voice by utilizing natural language processing technologies (Griol et al., 2013). Chatbots and virtual assistants are among the most widely implemented conversational AI technologies for customer engagement (Fotheringham & Wiles, 2023).

Chatbots are AI-driven systems created to conduct sequential conversations and act as enablers for human interactions (Illescas-Manzano et al., 2021). Chatbots are being developed to identify, mimic, and respond to human emotions with the aim of generating more natural interactions (Adamopoulou & Moussiades, 2020). These are hoped to improve customers' experiences (Tsai et al., 2021). Although the utilization of chatbots has

shown to reduce customer service expenditures, their impact on customer satisfaction has not been consistent (Campbell et al., 2020). While some consumers are satisfied with conversational AI interactions, many still favor human connections (Andriole, 2023).

In addition to chatbots, AI-driven real-time customer assistance has become essential in enhancing customer journeys by improving engagement, satisfaction and loyalty as well as providing companies with information about their customers (Das et al., 2023). Companies like Amazon, Apple and Google are consistently developing their AI devices, with features like Alexa's extended conversation ability, Siri's personalized voice recognition and Google Assistant's autofill feature (Kumar, 2021). These AI technologies that include natural language processing, deep learning, and machine learning offer instant personalized responses (Behera et al., 2024). Moreover AI-powered solutions, like Instacart Storefront, improve customer journeys by assisting customers throughout their shopping experiences by providing customized suggestions, additional information about products and answers to presented questions (Marr, 2024).

2.4.2.4 Marketing automation

Automation has additionally become a key trend in modern marketing and is driven by the increasing use of software to replace manual processes (Bagshaw, 2015; Hoffman et al., 2022). Segmentation, targeting, email campaigns and customer relationship management are examples of functions that can be automated by AI (Guercini, 2023). AI-driven marketing automation provides advantages like real-time data analysis and personalized marketing creation (Hoffman et al., 2022). Furthermore, AI algorithms can monitor potential changes, provide real-time recommendations, and enhance interactions during customer engagements (Gentsch, 2018). By automating routine tasks, AI allows marketers to focus on higher-level strategic decisions (Guercini, 2023).

2.4.2.5 Programmatic media buying

For the past ten years or so, programmatic advertising has revolutionized media buying and increased online advertising (Cooper et al., 2023). Programmatic advertising is an automated process that connects advertisers, publishers, demand-side platforms (DSP) and data management platforms (DMP) to efficiently handle advertisement inventory and campaign management (Chen et al., 2019). Advertisers utilize DSPs to purchase ad impressions by leveraging algorithms that target specific demographic groups to optimize bids for ad space. Publishers, who own or manage websites, provide the space for advertisements, which are then auctioned to advertisers through DSPs. DMPs, in turn, play an important role in collecting data from multiple sources to build detailed user profiles which enable precise targeting (Chen et al., 2019). When consumers visit a website, DMPs share their data, and the available ad space is auctioned in real-time to the highest bidder through DSPs. This approach ensures advertisements are displayed to the most relevant consumers, in the hopes to maximize engagement potentials (Kumar et al., 2024). Programmatic advertising has expanded across different digital channels (Kumar et al., 2024), offering advertisers a range of options to target and engage with their audience (Chen et al., 2019; Guitart et al., 2020).

2.4.2.6 Pricing

AI is also transforming the way pricing strategies are developed. Crafting a sufficient pricing strategy requires marketers to monitor consumer trends, estimate their price sensitivity and benchmark competitor prices (Campbell et al., 2020). With advancements in AI and machine learning, companies can collect vast amounts of historical and current data and analyze customers' behaviors at every stage of the purchase journey. This capability allows marketers to better understand what customers prefer and how much they are willing to pay (Ke, 2018). In essence, the objective shifts from finding the lowest price to identifying the optimal price point (Gentsch, 2018, p. 39).

As a result, professionals can determine the optimal price of a product or service, predict consumer price elasticity and implement pricing strategies, like dynamic pricing (Campbell et al., 2020). Dynamic pricing, driven by big data and machine learning algorithms, adjusts prices based on supply and demand as well as other factors such as seasonal changes (Campbell et al., 2020). According to Gentsch (2018) dynamic pricing is a forerunner of AI-driven pricing. Additionally, AI tools and technologies enable brands to create pricing indexes to monitor competitors' prices and offerings in order to remain competitive in the market (Campbell et al., 2020).

2.4.2.7 Extended reality (XR)

The adoption of extended reality (XR) technologies within business and retail has grown, attracting both academic interest and practical applications (Cipresso et al., 2018; Kumar et al., 2023; Wang et al., 2023). Companies like L'Oréal Garnier, Maybelline and Toyota have integrated XR into their marketing strategies (Gilliland & Sentance, 2024) with generative AI (GenAI), computer vision and large language models (Jaehnig, 2023). GenAI enables the creation of various media formats, such as images, videos, and 3D assets, which are important for developing immersive XR environments (Jaehnig, 2023). Computer vision enables XR applications to recognize and comprehend elements in the surrounding environment, allowing virtual objects to interact with real-world contexts (Jaehnig, 2023). Additionally, large language models enhance communication between individuals and virtual agents by processing and responding to language prompts within virtual worlds (Yang et al., 2022).

The integration of AI and XR offers diverse applications across various industries. An example of this retail where Haomaiyi, a leading online store in China, has created a virtual fitting room technology (Yang et al., 2022). This AI-based solution functions as a personalized fashion consultant, analyzing customer data, such as individuals' sizes and purchase histories, to provide style recommendations and virtual try-on opportunities. This approach has, for instance, resulted in converting consumers using the virtual fitting

room feature into customers and decreased certain brands' return numbers (Yang et al., 2022).

2.4.2.8 Content creation

Lastly, the rise of GenAI has enabled the creation of new increasingly personalized content that fosters unique customer experiences. For years, effectively targeting audiences and content marketing have been promoted as key strategies for achieving success in marketing (Gentsch, 2018). According to Kshetri et al. (2024), Open AI's ChatGPT has become the most widely used GenAI tool among professionals. The tool's advanced language generation capabilities enable marketers to produce customized content. Moreover, ChatGPT helps with brainstorming as well as sparking creative processes (Kshetri et al., 2024). Open AI's DALL-E2, on the contrary, can develop realistic images and art based on written instructions (Kshetri et al., 2024). These tools, thus, help companies reduce the amount of time required to create content for marketing (Kshetri, 2023).

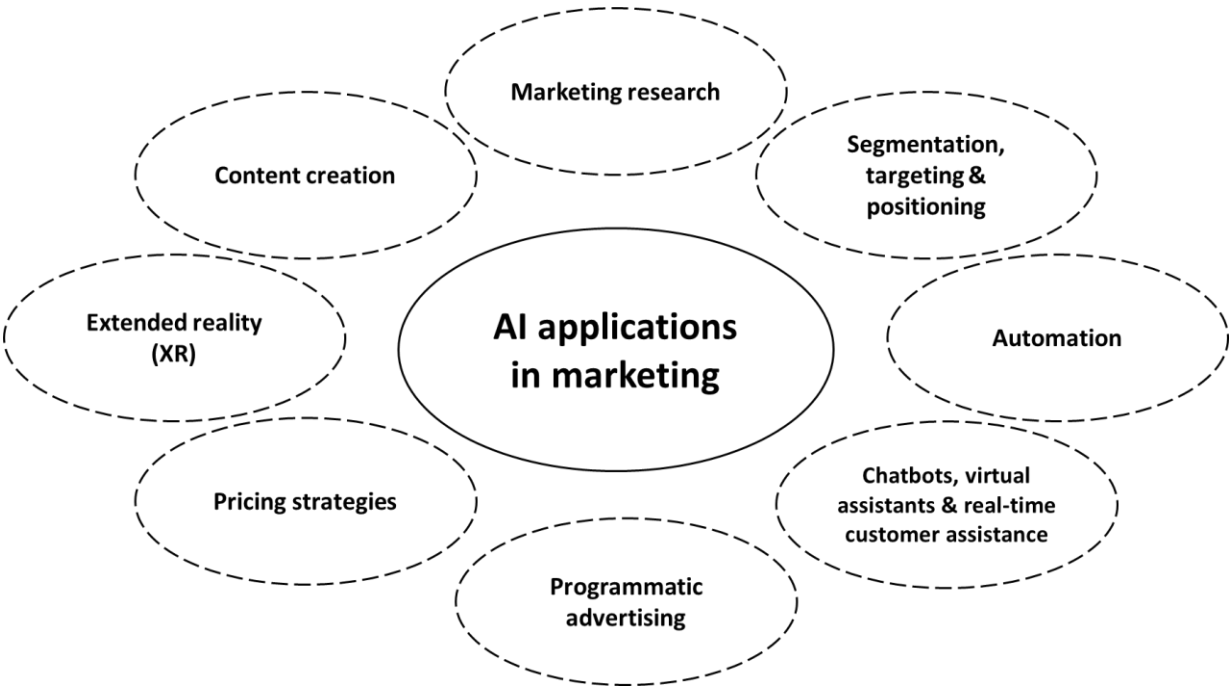

Figure 2. AI applications in marketing.

2.4.3 Benefits of AI in marketing

AI's implementation into the marketing field has provided many opportunities and advantages illustrated in **Figure 3**. A few years ago, the practical benefits and broad adoption of AI were not as widely recognized as they are today, due to individuals being doubtful and carefully optimistic (Hagerup, 2023). Reasons why companies were reluctant to deploy AI into their business operations included the lack of technological, company and environmental readiness as well as worries over the required financial investments and dependency on third-party stakeholders (Enholm et al., 2022). However, organizations that have adopted AI and leveraged its capabilities are already gaining a competitive edge (Kumar et al., 2024). Apple, Google and Microsoft were, for instance, pioneers in integrating AI into their operations and are currently capitalizing on the advantages.

In marketing, Amazon emerged as an early AI adopter, utilizing it for product recommendations, enhancing shipping efficiency and developing the Amazon Go store idea (Harrigan, 2022). Similarly, Starbucks embraced AI early on, integrating it into its mobile app by studying customer choices and purchase histories to deliver customized marketing (Kumar et al., 2024). Furthermore, Netflix has long been leveraging AI to provide personalized recommendations for movies and shows based on users' viewing behaviors. These examples highlight the strategic significance of early adoption. According to the resource-based view, a company's competitive edge is built on "resources that are valuable, rare, imperfectly inimitable, and non-substitutable" (Barney, 1991, p.116). As technology and other resources become more easily replicated, gaining early access to these assets becomes crucial for maintaining a competitive position (Kumar et al., 2024).

A significant benefit of using AI in marketing is the technology's ability to personalize and tailor offerings to optimize customer influence, engagement and satisfaction (Kumar et al., 2019; Huang & Rust, 2021). For example, AI-driven analysis of user-generated

content allows companies to better understand and meet customer requirements (Timoshenko & Hauser, 2019). Moreover, AI can predict psychological attributes based on individuals' digital activity as well as smartphone usage (Gladstone et al., 2019; Stachl et al., 2020), which create opportunities for personalized advertising and targeted persuasive communication (Matz & Netzer, 2017).

Moreover, AI-powered recommender systems benefit businesses and customers by utilizing customer preference data to forecast how individuals may respond to and rank products (Milano et al., 2020). Collaborative filtering, a popular method of recommender systems, bases recommendations on users' past behaviors and choices as well as the preferences of other similar consumers (Cappella, 2017). For e-commerce and online retailers, these systems help encourage cross-selling, convert potential buyers into customers, and enhance the customization of the offerings and browsing experience (Pathak et al., 2010; Hermann, 2022). In turn, customers benefit from improved information filtering and better purchase decisions that create satisfying experiences (Lu et al., 2015; Haubl & Trifts, 2000).

AI's ability to manage large amounts of data is another advantage for marketing. The technology excels at analyzing and uncovering structured and unstructured data (Qin & Jiang, 2019), enabling it to identify hidden patterns that would be challenging for humans to uncover. The technology's ability to process text, voice, pictures, and videos allows companies to analyze customer actions and improve sales results (Luo et al., 2021). For instance, companies like Chorus and Cogito utilize real-time speech analytics to assess communication data between sales associates and customers and offer immediate feedback on factors like tone (Luo et al., 2021; Kopalle et al., 2022). Consequently, the salespeople are able to refine their skills and enhance their performance.

Furthermore, AI marketing offers benefits to people living in disadvantaged regions, by enhancing accessibility (Kopalle et al., 2022). Google's AI center in Ghana has, for example, improved its natural language processing algorithms to support the approximately

2 000 languages spoken across Africa (Hao, 2019). Similarly, companies such as Telkomsel and Unilever in Indonesia have partnered with Kata.ai, a conversational AI platform, to automate as much as 96% of customer interfaces with little human input (TRPC and IIC, 2020). Additionally, AI's speech recognition and speech-to-text capabilities offered by, for instance, Google translate, provide solutions for overcoming the challenges associated with low literacy rates in emerging markets (Kopalle et al., 2022). The widespread adoption of AI technologies, such as text, voice, picture, and video analytics tailored to local needs, have the potential to improve the well-being for individuals in economically disadvantaged regions (Kopalle et al., 2022). These advancements can help bridge accessibility gaps and foster greater inclusion in digital services.

Modern consumer increasingly requires swift and smooth encounters (Ostrom et al., 2021). AI-powered chatbots and virtual assistants are suited to fulfill these demands (Kumar et al., 2024). Chatbots can strengthen the relationships between customers and businesses by providing quick, convenient and personalized service (Kumar et al., 2019). For marketing professionals, AI chatbots represent a cost-effective solution to broaden their reach and efficiently control customer interactions across different platforms (Kshetri et al., 2023). Implementing chatbots allows companies to scale their customer support capabilities, promoting growth without increasing the costs associated with additional training or hiring (Iles, 2020).

Finally, AI tools benefits organizations by enabling them to enhance their profitability through revenue growth and cost reductions (Davenport et al., 2020). Revenue growth can be achieved by making better marketing decisions, such as optimizing pricing, promotions and product recommendations as well as improving customer engagement. Additionally, costs can be reduced by automating routine marketing tasks, customer service activities and structured financial and commercial activities. The World Economic Forum (2020) anticipates that technologies like AI will contribute nearly 24% to the global GDP by 2025, and Fortune Business Insights (2024) projects that the AI market will surpass $2,740.46 billion by 2032.

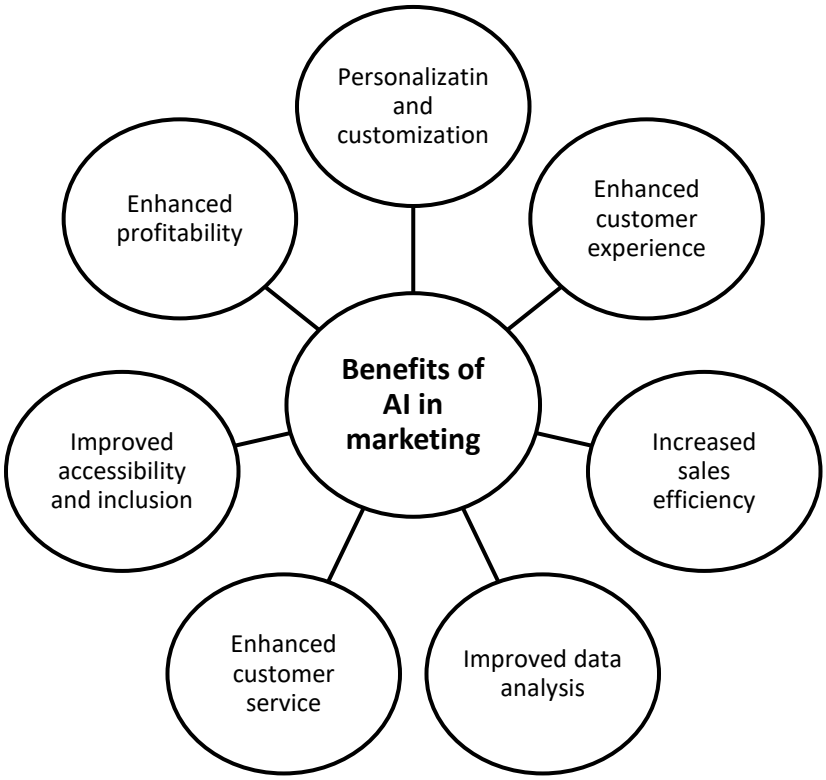

Figure 3. Benefits of AI in marketing.

2.4.4 Challenges of AI in marketing

In addition to the opportunities AI provides, various challenges have been acknowledged by researchers. These challenges, shown in **Figure 4**, extend beyond technical implementation to include ethical, environmental, and legal concerns that affect businesses and consumers. Key issues such as data privacy, potential biases, consumer manipulation, environmental impact, accountability, and intellectual property rights reveal the multifaceted implications of AI in marketing (Davenport et al., 2020; Kumar & Suthar, 2024).

Research findings indicate that consumers are increasingly concerned about the privacy and protection of their personal information (Martin & Murphy, 2017; Davenport et al., 2020), making data privacy a major ethical issue in AI marketing (Kumar & Suthar, 2024). Mittelstadt et al. (2016) argue that privacy and security concerns stem from the large-

scale data processing enabled by AI algorithms. Tucker (2019) further explains that privacy issues are complex due to three main factors: (1) the affordability of data storing, which can lead to data retention for longer than initially intended, (2) the potential for data to be repurposed for uses beyond its original intent, and (3) the possibility that information about a person may additionally include details about other people. Creating policies for the protection of individuals' information involves balancing two conflicting objectives (Davenport et al., 2020). Insufficient privacy protections may discourage consumers to use AI-related applications, whereas excessive regulation could hinder the development of technological innovations.

Another ethical challenge linked to the utilization of AI in marketing is job displacements (Kumar & Suthar, 2024). Although AI tools provide efficiency, the automation of tasks conventionally executed by people can result in job losses and wider economic inequality (Brynjolfsson & Mitchell, 2017). For instance, customer service has been affected by technologies due to AI-powered chatbots and virtual assistants partially or fully replacing human roles (Adam et al., 2021). The way these tools have streamlined the operations has contributed to job reductions in the field (Adam et al., 2021). Nevertheless, AI systems are not yet able to fully replace human employees in many roles due to their limitations (Kumar & Suthar, 2024), such as their inability to understand accents or dialects (Nacimiento-García et al., 2024). Additionally, human interactions provide a degree of empathy that machines are currently incapable of replicating (Kumar & Suthar, 2024).

Furthermore, a critical ethical concern in AI marketing is the risk of discrimination and bias (Campbell et al., 2020; Kumar & Suthar, 2024). AI systems can reinforce biases that appear in the data they are taught on. If historical data contains inequality, such as gender or racial disparities, AI models may spread these biases resulting in unfair outcomes (Davenport et al., 2020). For example, previous studies indicate that AI algorithms designed to evaluate job candidates might favor certain demographic groups over others due to biased training data (Weissman, 2018). Consequently, this challenge is concerning, as the use of AI could unintentionally disadvantage minority groups or reinforce existing

inequalities. Moreover, while the technology offers advantages in segmentation, targeting, and positioning, its targeting capabilities can unintentionally lead to illegal price discrimination if pricing is based on group characteristics (Campbell et al., 2020). In the EU, using algorithms to set prices based on observable group traits is considered discriminatory, because it may unfairly penalize individuals who do not align with the general behavior of their group (Newell & Marabelli, 2015).

In addition, Kumar and Suthar (2024) identify customer manipulation as an ethical challenge. The use of the technology to analyze customer behavior and create personalized marketing campaigns has raised concern about the potential manipulation of vulnerable consumers. By targeting individuals based on psychological characteristics, AI can cause individuals to make decisions that are not in their best interest (Kosinski et al., 2013). The lack of AI's transparency further complicates this issue, because consumers are often unaware that AI tools are being used to target them and may not even fully understand how the technologies work (Puntoni et al., 2021). Moreover, AI can be exploited to spread misinformation, including propaganda and deceptive content by altering the media and generating deepfakes. Such practices risk undermining public trust and can harm individuals and organizations (Kumar & Suthar, 2024).

Kumar and Suthar (2024) state that the environmental challenges caused by AI marketing are often ignored. AI applications are typically designed to drive sales and boost consumption, which is beneficial at the customer level if consumption fulfills individuals' desires (Csikszentmihalyi, 2000). However, from an environmental standpoint, increased consumption has detrimental effects, including the depletion of natural resources, damage in ecosystems and climate change (Swim et al., 2011). Fast fashion is an example of increased clothing consumption that has caused negative environmental effects, such as increased water consumption and CO_2 emissions (Hermann, 2022). Furthermore, AI-driven marketing may lead to other unintended consequences, due to the technology's complexity and unpredictability, making it difficult to forecast all possible outcomes

(Kumar & Suthar, 2024). This unpredictability can result in companies accidentally affecting societies as well as the environment negatively (Kumar & Suthar, 2024).

Regarding legal challenges, Kumar and Suthar (2024) mention responsibility and liability as major problems concerning the utilization of AI in marketing. Determining who is accountable for errors and harm caused by AI systems can become difficult as the technology becomes increasingly complex and autonomous (Kumar & Suthar, 2024). Furthermore, accountability and responsibility challenges derive from the absence of norms and regulations governing its usage in marketing (Kumar & Suthar, 2024). Existing rules may be insufficient to address the specific challenges presented by the technology, resulting in confusion regarding responsibility and liability. Hence, companies and individuals involved in the development and execution of AI-powered marketing may encounter legal complications (Kumar & Suthar, 2024).

Lastly, intellectual property protection is a legal challenge related to AI usage. The tools and technologies can generate innovative and original content; however, concerns may rise regarding the ownership and management of intellectual property rights (Kumar & Suthar, 2024). Furthermore, incorporating AI into marketing efforts may lead to potential copyright infringements if algorithms generate content that resemble pre-existing material (Kumar & Suthar, 2024). Hence, identifying the owner of content generated by AI systems is a notable challenge surrounding intellectual property rights. According to Kumar & Suthar (2024), in some cases, the organization that developed the AI algorithm owns the material, whereas in others ownership may belong to the companies or individuals that provided the data used to train it.

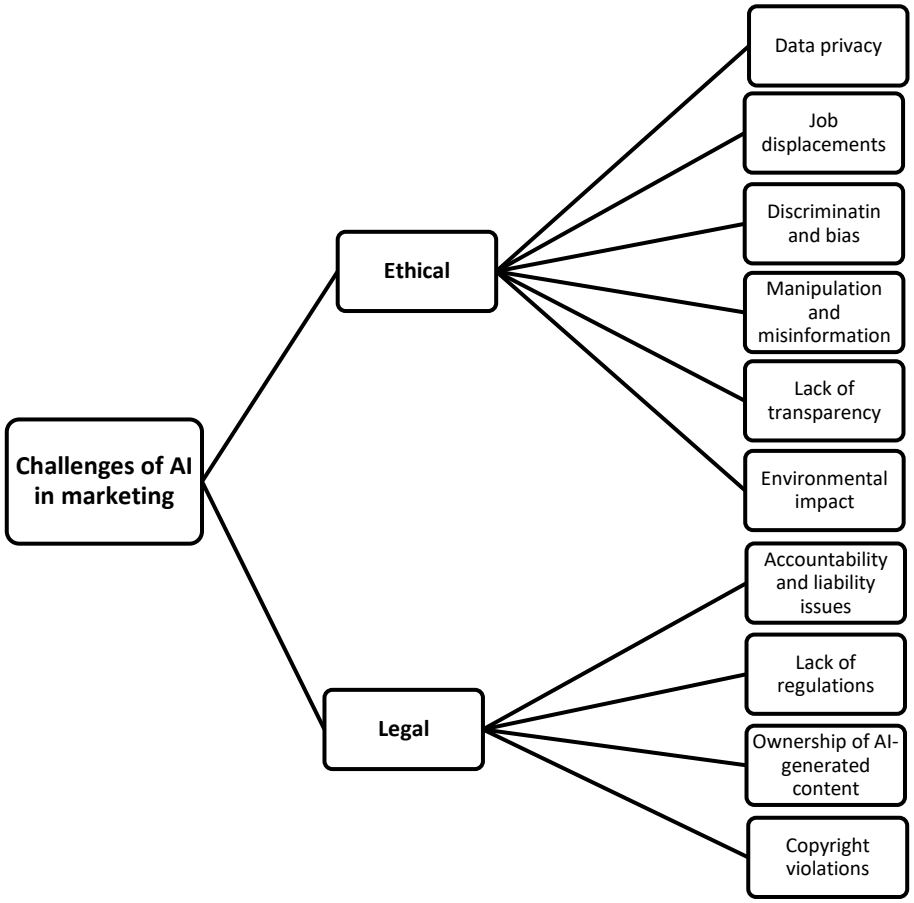

Figure 4. Challenges of AI in marketing.

2.5 Theoretical framework

Having discussed AI in marketing based on existing literature, this section presents the theoretical framework for the thesis. The framework is designed to provide a structural understanding of how AI is changing the marketing field by examining the four key dimensions: a) the current utilization of AI in marketing, b) the changes in job roles and responsibilities, c) the emerging skill requirements and d) perceptions of the future of marketing work. The framework synthesizes these dimensions into a structured model that illustrates how they are interconnected and contribute to a broader shift in the field. To conceptualize the evolution, this study draws upon Socio-Technical Systems (STS) Theory, which provides a lens for understanding how technology and human work interact.

The STS model, developed in the 1950s to enhance the quality of employment (Mumford, 2006), highlights the interdependence between social and technical components within an organization (Walker et al., 2008). A socio-technical system is "the synergistic combination of humans, machines, environments, work activities and organizational structures and processes that comprise a given enterprise" (Carayon et al., 2015, p. 550). Based on the theory, the success and performance of a system are determined by the interaction between two interconnected sub-systems: 1) the social sub-system, which includes relationships among individuals and teams as well as their qualities such as skills, norms, values and behaviors, and 2) the technical sub-system consisting of the tools, technologies, processes and work structures that produce the selected output (Bostrom & Heinen, 1977). The way the work system operates arises from the joint interaction of these two systems (Bostrom & Heinen, 1977).

STS theory is built on two primary principles (Walker et al., 2008). The first principle claims that the relations between the social and technical components creates the circumstance for either an effective or ineffective system (Walker et al., 2008). These interactions are multifaceted, consisting of linear relationships that can be designed and predicted, as well as non-linear, complex relationships that often emerge unexpectedly. According to Walker et al. (2008) combining the social and technical elements can be challenging because human factors do not always align with technical components. As systems become more complex, the technical elements may behave unpredictably, making the integration process more complicated (Walker et al., 2008).

The second principle of STS theory emphasizes the importance of joint optimization (Walker et al., 2008). Joint optimization refers to balancing the requirements of social and technical subsystems to ensure that the organization performs efficiently (Mumford, 2006; Chen & Nath, 2008). This means that optimizing solely the technical system or the social system can cause an increase in unforeseen and potentially detrimental interactions that may compromise the system's overall effectiveness (Walker et al., 2008). The

framework emphasizes that the introduction of new technologies, such as AI, does not simply replace human work but instead leads to a reconfiguration of tasks, responsibilities and required competences.

Applying this perspective to marketing, AI technologies act as the technical sub-system, automating repetitive and routine tasks, while marketing professionals represent the social sub-system, adapting their skills and roles in response to AI-driven transformation. The interaction between these two sub-systems determines the overall impact of AI on marketing work. Nonetheless, rather than fully automating marketing work any time soon, AI functions as a collaborative assistant, augmenting human tasks (Davenport & Kirby, 2016). This aligns with theories of human-AI augmentation, which argue that AI tools and technologies should be utilized to enhance human expertise instead of replacing them (Daugherty & Wilson, 2018).

The adapted theoretical framework for this thesis, presented in **Figure 5**, reflects the collaborative dynamic by illustrating how AI is influencing various aspects of marketing work. The transformation caused by the emerging tools and technology is evident in the changes in job roles and responsibilities, skill requirements and perceptions of the future of marketing work. Together, these highlight the interactive relationship between AI and marketers, demonstrating how technological advances are not solely replacing human work but reshaping the form of marketing roles, required skills and industry expectations.

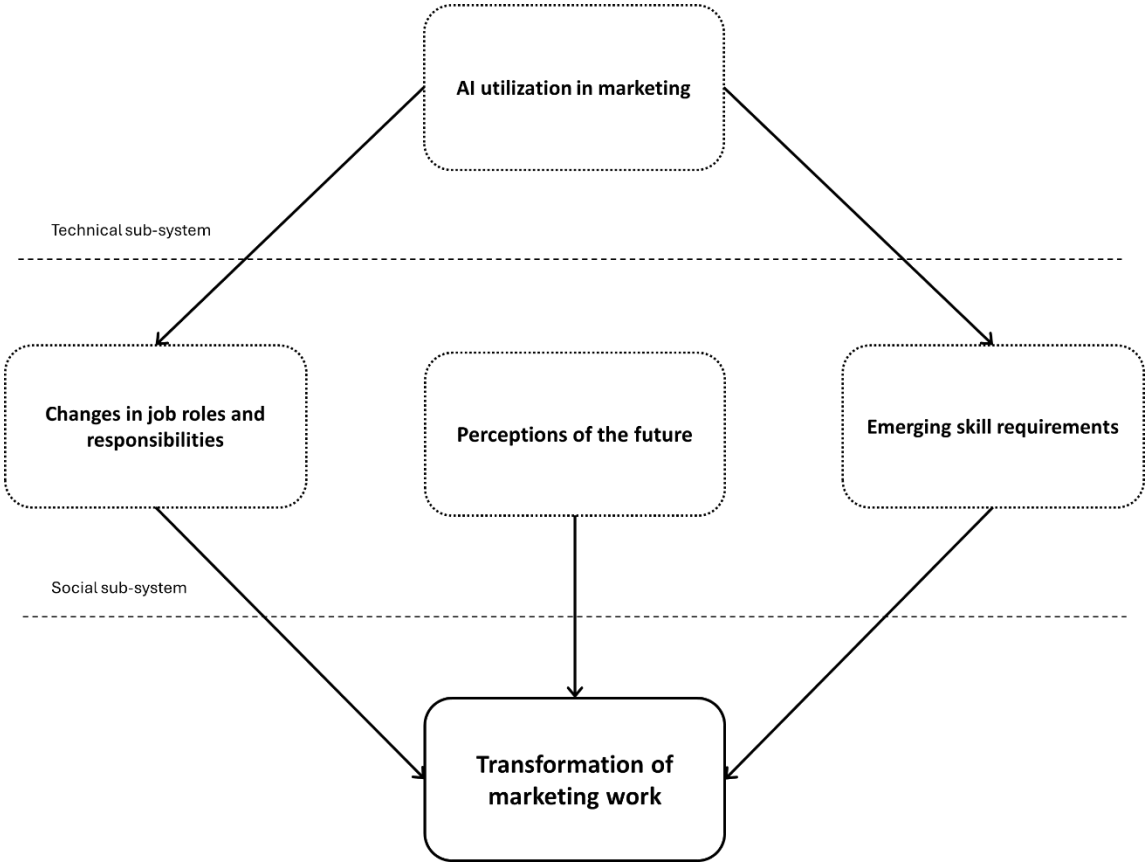

Figure 5. The adapted theoretical framework.

3 Methodology

The following section outlines the methodological approach of this thesis. The chapter begins with an explanation of the research strategy and method and follows with a description of the data collection as well as analysis methods. Lastly, the validity and reliability of the study are discussed with descriptions of the ways in which these were enhanced during the research process.

3.1 Research strategy and method

Saunders et al. (2007) have developed a six-stage theoretical model called the “research onion” for designing and creating research methodologies. The framework, presented in **Figure 6**, consists of a series of layers depicting the stages of a research process beginning with the broad research philosophy and progressing down to the specific data collection techniques (Saunders et al., 2007, p. 102). By “peeling off” the layers from the outermost to the innermost, the research onion guides scholars through decision making stages that ensure all parts of the study are aligned with each other.

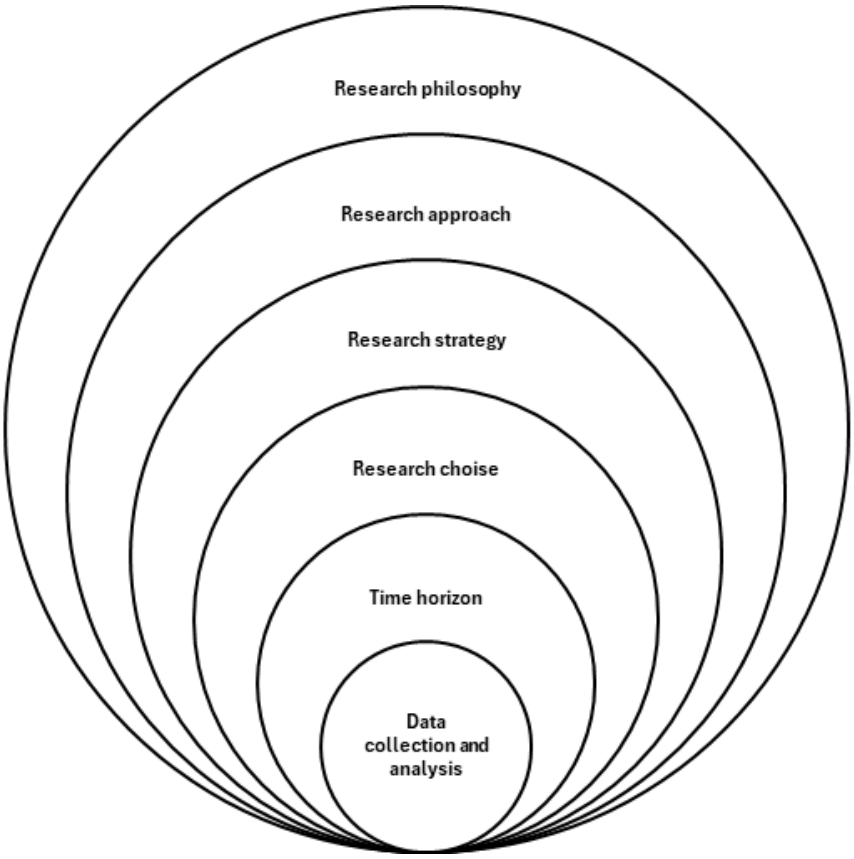

Figure 6. Research onion (Saunders et al., 2007).

The furthest layer from the research onion's center represents the research philosophy which consists of the beliefs and worldviews that form the foundation of the study (Saunders et al., 2007, p. 101). According to Eriksson and Kovalainen (2008), engaging with philosophical concepts is essential for defining the foundation of a research design and strategy. These assumptions subsequently shape the trajectory of the research, outlining the steps from forming a research question to drawing conclusions (Eriksson & Kovalainen, 2008). The process includes making decisions regarding data collection, analysis methods, result interpretation as well as presenting conclusions (Eriksson & Kovalainen, 2008).

Saunders et al. (2007) argue that the philosophy that is the foundation of a study can be framed through either an ontological or epistemological perspective. Ontology refers to the assumptions of the nature of reality and existence that form the basis for a research (Saunders et al., 2007, p. 108). Epistemology, on the other hand, focuses on determining what is regarded as valid knowledge within a field and how it can be obtained (Eriksson & Kovalainen, 2008). Among the philosophies outlined in Saunders et al.'s (2007) framework, the interpretivist philosophy suits this thesis because it enables the creation of new perspectives through qualitative research. The interpretivist philosophy focuses on exploring social phenomena within their natural context, recognizing that reality is shaped by subjective interpretations and cultural influences (Saunders et al., 2007, p. 106). Hence, it allows the comprehension of the experiences and perspectives of marketing professionals as they navigate changes in their roles, skills, and tasks due to AI integration.

Moving inwards, the next layer involves selecting a research approach. Saunders et al. (2007, p. 117-119) present three approaches: the deductive approach, the inductive approach and a combination of the two. The deductive approach aims to form hypotheses based on existing theories, which are tested through research (Eriksson & Kovalainen, 2008). The inductive approach, on the contrary, enables the creation of theories based on findings emerging from research itself (Saunders et al., 2007, p. 118). The third approach, a combination of the two methods, is applied in this thesis because it enables the testing of existing theories and expands upon them based on empirical findings (Saunders et al. 2007, p. 120). Hence, theory serves as a foundation that is further refined through empirical research.

The research approach layer is followed by the strategies stage where the specific methodologies to address the research question are determined (Saunders et al. 2007, p. 133). This thesis employs an exploratory interview study as the research strategy, which supports the chosen research approach. According to (Saunders et al. 2007, p. 133), exploratory research is beneficial when the goal is to understand a new or poorly understood

phenomenon and it can be conducted by reviewing existing literature as well as interviewing specialists. Since the use of AI in marketing is rapidly evolving and its impact on professionals' work is still developing, an exploratory approach enables an open-ended examination of how marketing professionals experience the transformation. Semi-structured interviews are used to conduct the research and collect detailed data by allowing participants to freely tell about AI integration's effects on their roles, skill requirements, responsibilities and future perceptions.

As a qualitative study, this thesis utilizes data collection and analysis techniques that interpret and generate non-numerical data (Saunders et al. 2007, p. 145). The fourth stage of the research onion focuses on the different ways qualitative and quantitative procedures can be used to execute a study. This stage, called the research choice, consists of three approaches to choose from: mono-method, multi-method or mixed method (Saunders et al. 2007, p. 145). The mono-method approach utilizes only one specific data collection method, either qualitative or quantitative, alongside its associated analysis technique, whereas the multi-method approach involves using multiple techniques within the same methodological technique when collecting data (Saunders et al. 2007, p. 145). If data is collected by combining qualitative and quantitative techniques to explore the research question from multiple perspectives, the mixed method approach is employed (Saunders et al. 2007, p. 145). To develop a deeper understanding of AI's role in transforming marketing work, this study employs a mono-method approach by conducting semi-structured interviews and a thematic analysis to identify key patterns.

Regarding the fifth layer, time horizon, this thesis follows the cross-sectional time horizon, which means that data is collected at a certain point in time (Saunders et al., 2007, p. 148). The opposite of a cross-sectional study is a longitudinal study where data is collected over an extended period of time (Saunders et al., 2007, p. 148). Lastly, the center of the research onion contains details of the data collection and analysis processes. These are addressed below in sections 3.2 Data collection and 3.3. Data analysis.

3.2 Data collection

The data for this thesis was collected by carrying out semi-structured interviews to explore the impact of AI on marketing professionals' roles, skills and tasks. The data collection began by selecting suitable companies and then identifying the right individuals to contact. The criteria for the interviewees were that they work in Finland and have a role in marketing. Twelve professionals with diverse backgrounds were eventually chosen. The participants had varying levels of experience and expertise in marketing and AI utilization which enabled diverse perspectives. The interviews were conducted via video conferencing systems such as Microsoft Teams and Google Meet to accommodate participants from various locations. The interviews, held in November and December 2024, were recorded with the interviewees' permission to guarantee validity and subsequently transcribed into text.

As mentioned, the interviews were semi-structured, guided by predetermined questions outlined in **Appendix 1**. Each interview began with an overview of how the data is used in the analysis. This was followed by a short introduction of the interviewer and the thesis topic. The interview questions were divided into five sections and involved themes like AI usage in work, changes in job roles and responsibilities, skill requirements and ideas on the future. The durations of the interviews ranged from 20 to 47 minutes, meaning that the average length of an interview was 33 minutes. All interviews were conducted in Finnish, the participants' native language. Nevertheless, the quotes included in the analysis were translated into English. Due to time constraints, one of the interviews was conducted through email responses. **Table 3** presents the dates and durations of the interviews.

Table 3. Interview details.

Interviewee	Date	Duration of interview
1	25/11/2024	35 min
2	25/11/2024	34 min
3	26/11/2024	41 min
4	28/11/2024	27 min
5	28/11/2024	47 min
6	28/11/2024	26 min
7	29/11/2024	27 min
8	29/11/2024	36 min
9	13/12/2024	20 min
10	13/12/2024	36 min
11	20/12/2024	30 min
12	-	By email

3.3 Data analysis

The data analysis process began by transcribing each interview using Microsoft Word and was followed by a thorough manual review and correction of the transcripts by the interviewer. Once the transcripts were ready, the data was coded using the Gioia Methodology. The method enabled a structured analysis of each interview (Gioia et al., 2013). The Gioia Methodology is a qualitative research approach in organization study designed to ensure a reliable data analysis of interview data that meets the standards of trustworthiness (Gioia et al., 2013). This approach consists of analyzing data by creating analytical codes, that are combined into 1st order codes that reflect the language and phrases used by the participants and 2nd order themes that represent patterns and collective themes emerged from the 1st order concepts (Nag et al., 2007; Gioia et al., 2013).

The data collected from the interviews was coded by leveraging the Atlas.ti qualitative data analysis software. This happened by downloading the interview transcripts into Atlas.ti and using the software's "codes" feature for 1st order coding. At first, many codes were generated. However, after analyzing each interview separately, all of the codes were reviewed again, and some codes were merged or deleted. The coding process

continued until no new distinct patterns could be identified across the interviews. As the 1st order concepts were identified, connections between them began to emerge. These relationships allowed for the joining of 1st order categories, grouping them into broader theory centered 2nd order themes (Nag et al., 2007; Gioia et al., 2013). The Atlas.ti software's "group" feature was utilized for this process. The 2nd order themes were then grouped into broader dimensions that encapsulate the thesis' central theoretical insights and findings.

3.4 Reliability and validity

Reliability is a traditional study criterion that focuses on the consistency of results (Saunders et al., 2007, p. 149) and is often associated with quantitative research (Eriksson & Kovalainen, 2008). It examines whether a specific measure, method or tool produces the same outcome when applied repeatedly under similar conditions. However, in qualitative research, there is debate regarding reliability when evaluating interview data because the methods may not align with the classical concept of reliability (Eriksson & Kovalainen, 2008). Saunders et al. (2007, p. 319) note that qualitative research findings are not always expected to be replicable as they capture the experience of a specific moment in time within a context that may change. Hence, conducting semi-structured interviews at a later time may yield varying outcomes. Nonetheless, providing a thorough explanation of the data gathering and analysis procedures enhances the reliability of this study (Saunders et al., 2007). Furthermore, detailed interview transcripts contribute to greater reliability by serving as evidence to validate the findings.

Similarly, validity serves as a fundamental evaluation criterion by addressing the accuracy and credibility of the research conclusions (Eriksson & Kovalainen, 2008). It involves assessing whether the findings provide an evidence-based representation of the phenomenon studied. According to Eriksson and Kovalainen (2008) validity takes a broader and somewhat different meaning in qualitative research as it aims to ensure the accuracy and trustworthiness of the research process and results. In the context of this thesis,

validity includes ensuring that the information collected through interviews accurately reflects the perspectives and experiences of marketing professionals as AI is integrated into their work. Saunders et al. (2007, p. 151) note that external validity relates to the generalizability of findings, suggesting that the results of this thesis demonstrate a certain level of generalizability. Interviewing 12 marketing professionals from diverse backgrounds and with varying experiences strengthens the validity by capturing a wider range of perspectives on the impact of AI. This diversity ensures that the findings are reflective of a broader context within the marketing field, increasing the creditability and applicability of the results.

4 Findings

This section presents the main findings of the study. The findings have been gathered into the code-aggregation diagram depicted in **Figure 7**, and the section is structured according to the diagram with each subsection corresponding to one of the four aggregate dimensions. To provide support for the dimensions, the subsections draw on second-order themes and first-order concepts. Furthermore, relevant interview quotes are included to add further context. The objective of this chapter is to present the main findings from the interviews and provide an answer to the research question.

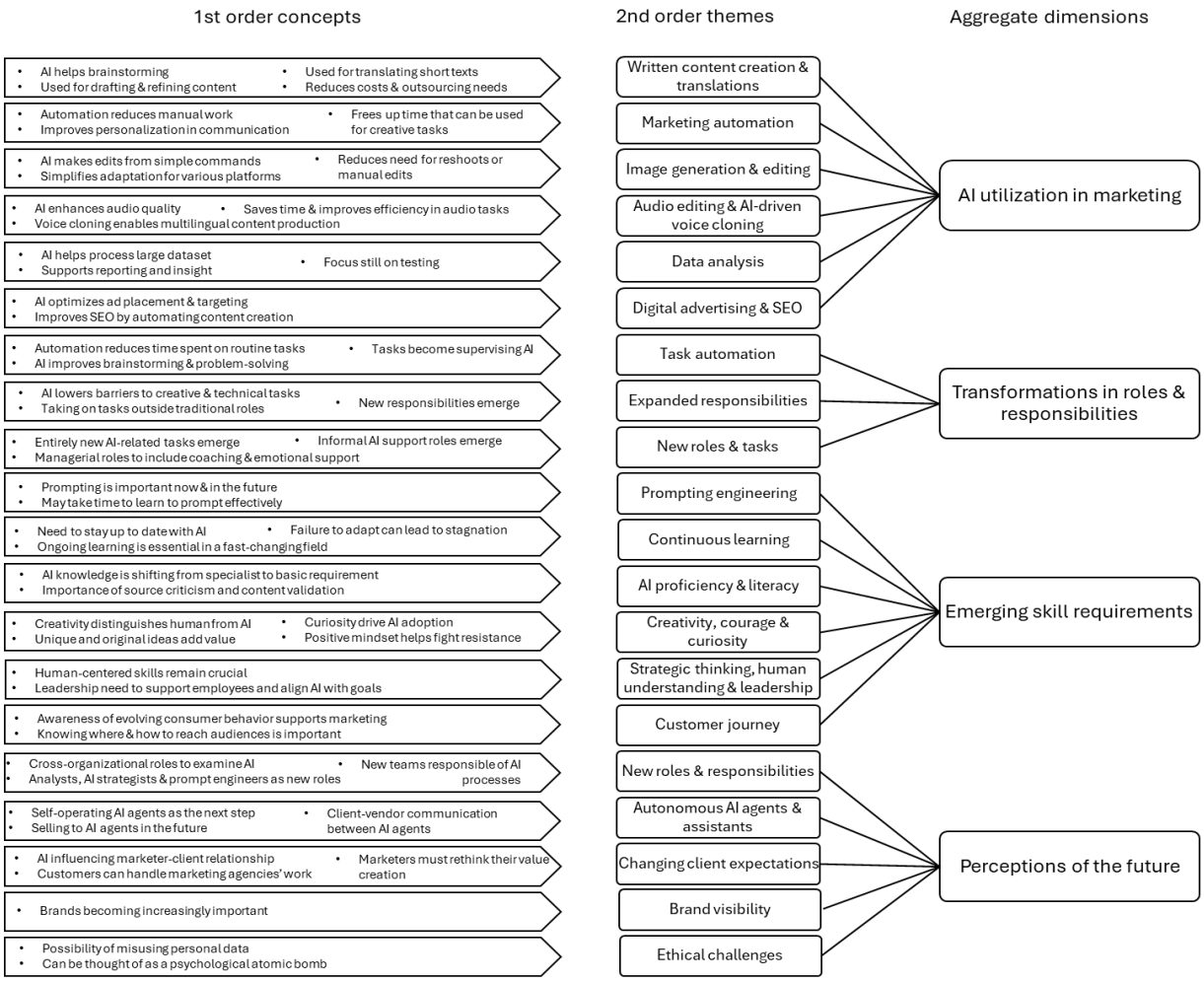

Figure 7. Code-aggregation diagram of findings.

4.1 Current utilization of AI in marketing

The interviews reveal that AI tools are already today being used for various marketing purposes. Professionals in the field rely primarily on language models from major providers, such as OpenAI's ChatGPT, Anthropic's Claude, and Microsoft's Copilot. However, some companies are also developing their own AI technologies, which derive from the existing models. The interviewed marketing professionals describe using AI for a variety of tasks, ranging from content generation and translations to automation, image and audio editing as well as data analysis. Even though the technology has been incorporated into many tasks, human oversight remains essential to ensure quality and strategic alignment. The following section presents the most common ways AI is currently leveraged in marketing, as described by the interviewees.

4.1.1 Written content creation

The interview data suggests that AI is increasingly used for producing written content, such as advertisements, blog texts, headlines, and call-to-action messages, in marketing. The existing tools have been adopted to support idea generation and text editing, as well as help create alternative versions of existing content for different platforms and audiences.

> *"In terms of text, ChatGPT is most commonly used, with content creators mainly utilizing it as an aid in brainstorming." (Interviewee 3)*

> *"If a question came up, I could ask it [AI], and it also served as a kind of sparring partner for brainstorming ideas. I often used it to create example texts that I could use, modify and improve. I would also ask for suggestions on what to write, what could be added and how to refine content." (Interviewee 6)*

Nevertheless, the interviews suggest that AI-generated content is not yet at a level where marketing professionals can rely on it without first reviewing its quality and accuracy. Participants emphasize that current tools are not advanced enough to be fully

trusted for creating advertisements or other marketing texts, as they tend to produce incorrect and low-quality content. As a result, AI is currently used as a supportive tool or brainstorming partner that assists in idea generation as well as providing example texts that are refined by humans to assure they fully meet the desired standards.

> *"*You can't fully outsource the creation of high-quality content to it, but it's a good brainstorming partner.*" (Interviewee 3)*

> *"I have noticed that you can't take the material exactly as the AI provides it. It needs a human touch." (Interviewee 9)*

> *"Very rarely do I end up using the text generated by ChatGPT directly, and I almost never use the first version it produces." (Interviewee 10)*

4.1.2 Translations

Another commonly cited use of AI tools in marketing is translation, particularly for converting content such as advertisements and other marketing texts into different languages.

> *"We already have an automated translation tool in place, so when we input Finnish text, we request a translation from the system, and it generates an AI-generated translation." (Interviewee 9)*

Interviewees suggest that AI performs well in translating short and simple texts. In such cases, the translation is often usable immediate or requires only minor editing. However, for longer and more complex content, marketing professionals still rely on traditional translation services alongside AI tools, which suggest that the technology is not yet completely usable for all translations. Nevertheless, interviewees predict that AI tools could replace human translators entirely if AI-generated translations become flawless, despite current limitations. Consequently, the technology is increasingly seen as a cost-efficient alternative to outsourcing, as it is capable of handling translation tasks that have been managed by external providers.

"We have a translation service for translating longer texts, but AI serves as a helpful tool when there's need for something like a 'Read more' text or coming up with a slogan. It assists with those short, few-word translations." (Interviewee 4)

"It also brings cost savings, for example in tasks like translation work, text refinement or image editing, which were previously done by external firms. Now, an AI tool can do it for you for free in just a few minutes." (Interviewee 10)

Nonetheless, concerns regarding the quality and accuracy of AI-generated translations persist, particularly in preserving the original text's tone and meaning, which is why human oversight remains essential. Looking ahead, interviewees predict that the continuous advancements in technology may influence the skill requirements of marketing professionals because if AI-generated translations become consistently accurate, the need for language proficiency may diminish.

"Language proficiency requirements may also change once it is confirmed that AI consistently produces accurate translations. At that point, it might no longer be necessary to know Swedish in order to create advertisements for the Swedish market." (Interviewee 3)

4.1.3 Marketing automation

Moreover, automation emerged as a frequently mentioned AI application. Marketing professionals emphasized how automation is transforming traditional processes in content creation and campaign execution. An example is found in the production of radio advertisements, where automation has reduced the need for human involvement in production tasks. As a result, marketers can execute campaigns with fewer external resources.

"There are already several companies publicly offering radio advertisements in a way that allows, for example, a local barber to go to their website, enter details about an upcoming promotional campaign for the next week, specify the target audience, and select the desired radio stations. The system then generates an ad, providing three different options to choose from, each with music, effects, and voiceovers automatically included. The user simply listens to the options, selects

> *the preferred one, and with the press of a button, the ad is directly scheduled into the local radio stations' broadcast lineup." (Interviewee 2)*

In addition to content production, automation is also being used to enhance customer communication. Interviewees described how AI tools enable more personalized and timely interactions by automating responses and integrating customer-specific details, such as names, into messages. This helps eliminate impersonal or negative experiences in customer interactions. However, some participants noted that basic personalization, like addressing a customer by their name, has become a standard and, thus, does not impress consumers anymore. Therefore, the challenge is not only to remove poor and impersonal experiences but to create interactions that feel more personalized, engaging, and emotionally resonant.

> *"AI is currently at least capable of eliminating negative experiences, meaning that, for example, during customer interaction, you no longer necessarily have those particularly bad experiences. – – But then, it often still feels somewhat lukewarm, so the question becomes: how do you manage to create a customer experience that exceeds expectations?" (Interviewee 8)*

Another growing use case discussed involves the automation of caption generation for short-form video content. Interviewees explained that captioning videos improves accessibility and enables the content to reach wider audiences. Utilizing AI to generate captions reduces the time and effort involved in manual transcription. Thus, by minimizing the repetitive workload of adding subtitles, marketing professionals can dedicate more resources to creative tasks, such as content ideation and production, rather than repetitive tasks.

> *"We create short videos for social media, and we recently started using an automated captioning, so AI generates the subtitles. I think that's a good example, because manually adding captions takes a lot of time, and in my opinion, it's better to spend that time coming up with ideas and planning the video instead." (Interviewee 4)*

4.1.4 Image generation and editing

In addition to generating text, AI is utilized for creating and editing images from written prompts. According to interviewees, AI-driven image generation and editing tools have become advanced, though some note there is still room for improvement. In the past, image editing relied on manual methods such as precise cropping and adjustments as well as skilled prompting that required good technical knowledge. Today, on the contrary, AI tools can perform these tasks automatically by making complex modifications based on straightforward commands. This development has simplified the image creation and editing process, making it quicker and more accessible by lowering the technical barriers traditionally associated with advanced image alteration.

> *"Now you can directly tell the tools to remove a woman's hat in an image, and the model will do it for you, whereas before, it required very precise cropping and prompting" (Interviewee 2)*

Furthermore, advancements in image editing enable marketing professionals to extend photos to fit different aspect ratios, addressing the growing need for adaptable content as advertising becomes increasingly fragmented across multiple platforms. Traditionally adapting an image to different formats, such as square, vertical or wide, required either cropping or manual editing to fill empty spaces. Today, AI-powered tools allow marketing specialists to extend images, by analyzing the existing elements of a photo and generate extensions of the background and objects. For example, if a company has a landscape-oriented product image but needs a vertical version for a mobile ad, AI can extend the sky, grass or surrounding elements without requiring a reshoot. This innovation is useful in marketing when content needs to be repurposed across platforms with varying format requirements.

> *"In image editing, there is Photoshop's Generative Fill feature, which allows images to be extended to fit different aspect ratios. If some background is missing, it's no longer necessary to arrange new photoshoots as you can continue working on it there, and nowadays, since the advertising landscape is so fragmented, you usually need to create many different versions from the same material." (Interviewee 3)*

4.1.5 Audio editing and AI-driven voice cloning

AI tools are additionally benefiting audio editing, as they can be used for enhancing sound quality. Before, removing unwanted noise, such as echoes, was difficult or even impossible without access to studio equipment. However, with AI tools, low-quality audio recordings can now be transformed into near-studio-quality sound. This is because AI-based audio enhancement tools can automatically detect and remove the unwanted noise with minimal manual effort. This ensures that, for example, commercials and promotional videos sound clearer, and previously recorded material is more polished and usable on different platforms.

> *"Previously, there was no way to, for example, remove echo from audios, so if we have low-quality source material, making it almost studio-quality is now possible with many different tools." (Interviewee 2)*

Another audio related advancement discussed is AI-driven voice cloning, which allows the generation of audio content in a specific voice by providing a short voice sample. This means that a voice sample can be used to generate spoken content in multiple languages while retaining the original speaker's voice. One interviewee provided an example of an AI system taking a 20-second recording of a person's voice and generating audio in Chinese and other languages withing seconds. These technologies present new opportunities in marketing, such as creating multilingual content for global audiences without requiring separate voice recording.

> *"We have also experimented with audio files, where you provide a voice sample and the application can convert any text into speech as if I had read it myself, even in 20 to 30 different languages." (Interviewee 5)*

4.1.6 Data analysis

Compared to other applications, data analysis emerged as a less commonly mentioned use of AI in marketing. Nevertheless, a few interviewees discussed the increasing use of AI to analyze and extract data from large datasets. Traditionally, identifying patterns and trends from marketing data has been time-consuming. The increasing amount of data available has posed challenges because it has in many cases become too extensive to be manually analyzed. Thus, marketing professionals are currently focusing on testing AI's ability to process and interpret customer data from websites, advertisement campaigns and other sources. The emphasis on "testing" suggests that AI's role in this area is still evolving and marketing specialists are exploring its abilities to determine how well AI can detect insights and automate parts of the reporting process.

> *"Now more focus is on exploring whether feeding the latest ChatGPT models with data collected from sources such as customer's website, advertising or other channels can be used to identify insights, make observations and support reporting. This aspect is currently being tested." (Interviewee 2)*

4.1.7 Digital advertising and SEO

Lastly, a few interviewed marketing professionals explained that AI has been integrated into digital marketing for years, particularly in advertising optimization and search engine visibility. According to participants, platforms like Google Ads and Facebook Ads represent some of the earliest AI implications in the field. These platforms have long used AI to automate bid adjustments, audience targeting and ad placements. As a result, marketers do not need to manually manage cost-per-click rates or determine the most effective audience segments for each campaign.

> *"So, the optimization of Google Ads and Facebook, where the built-in optimization tools are perhaps the more visible AI implementations that have already been widely used for a long time. This means that you don't have to manually decide how much to pay per click for each ad; instead, you can provide data to the AI, and it will automatically optimize the advertisement." (Interviewee 3)*

This perspective was reinforced by another interviewee, who explained that AI has long operated in the background in digital advertising. Furthermore, they noted that due to seamless integration of AI into advertising platforms, marketers may not always recognize that they are using AI tools. Nevertheless, these systems consistently analyze campaign data and user behavior to ensure that advertisements are delivered to the most relevant audiences:

> *"The paid advertising channels I use, like Google and Facebook, actually already use AI and have been using it for a long time to target ads. So, in that sense, every day when I optimize our advertising, there is actually an AI system running in the background, trying to find the right people for the target audience. In that sense, even though I may not directly think of it as an AI tool, AI plays a significant role in ensuring that the right people are reached." (Interviewee 11)*

Moreover, beyond advertising, the interview findings indicate that AI is increasingly being used for SEO, which improves website visibility. Participants noted that AI tools are now capable of automating content production, allowing marketers to generate large volumes of content that target the right search terms. This automation improves SEO performance as well as reduces the manual effort involved in creating optimized content.

> *"If you want your pages to rank higher in search results and ensure that blog articles appear for the right keywords, AI has helped us produce a much higher volume of relevant content completely automatically. This has significantly improved our SEO visibility and increased website traffic." (Interviewee 11)*

4.2 Transformations in job roles and responsibilities

The above-mentioned AI applications have altered the nature of job roles and responsibilities in the marketing field. Although job titles and organizational structures mainly remained the same, the day-to-day work of marketing professionals is changing. The interviews revealed that AI is affecting what marketing professionals do and how they do

it. The changes discussed below are causing marketers to reconsider their skills and the contribution they make to the organization.

4.2.1 Task automation

As discussed, AI is reshaping work processes by automating tasks. This shift has optimized various aspects of work, such as problem solving and creative work. Insights from the interviews suggest that while the overall structure of job roles within organizations has remained largely unchanged, AI is altering how time is distributed across different tasks, leading to greater efficiency in day-to-day work. The automation of routine, repetitive tasks is expected to continue, which will allow marketing specialists to focus on more complex and strategic responsibilities.

> *"Routine work and repetitive tasks have already decreased, and this decline is likely to continue in the future" (Interviewee 1)*

An example of AI impacting the time spent on a task is the technology assisting with content creation and idea refinement which has reduced the time marketing professionals spend on brainstorming. Furthermore, various interviewees note that problem solving has become faster as AI tools are able to quickly provide insights, summarize information and assist in research. Previously, complex issues required more manual effort to be resolved but with the help of AI, users can solve problems more easily, allowing marketing professionals to focus more on execution rather than prolonged troubleshooting.

> *"The structure of the tasks hasn't necessarily changed, but the amount of time I spend on certain things has changed, meaning that brainstorming ad copy, especially in English and to some extent in Finnish, now takes much less time because it can be somewhat automated, and problem-solving takes much less time as well, so AI helps a lot in that kind of situations." (Interviewee 1)*

The automation of repetitive tasks has also shifted some marketing specialists' work from hands-on manual work towards overseeing and guiding AI-driven processes. An

interviewee explained how their responsibility has altered towards supervising algorithms by ensuring that they receive the right input in order to produce the desired output. This means that as AI handles the technical execution, marketing professionals are beginning to focus more on supervising AI's data processing.

> *"It [AI] has changed, for example, the basic work of advertising optimization to a much greater extent into something where you need to focus on ensuring that the algorithms are receiving the right kind of data, enough data, and are performing the right actions. It's becoming more of a supervisory role, where you no longer have to manually adjust bid prices for different keywords yourself" (Interviewee 3)*

4.2.2 Expanded responsibilities

The integration of AI into marketing has also expanded the scope of marketing professionals' responsibilities. Interviewees describe how AI tools enable them to take on responsibilities that previously required specialized expertise. A recurring theme in the interviews is that AI is lowering the barriers to entry for creative and technical tasks. As a result, marketing professionals are now able to perform work that previously has been the responsibility of specialists.

> *"I'm not a graphic designer, but with the help of AI, I can handle tasks that previously would have required a professional to do." (Interviewee 11)*

> *"Nowadays, you don't necessarily need to have a formal education in graphic design, but you can still produce visual content. In this sense, traditional job roles are evolving, and their responsibilities are expanding due to AI." (Interviewee 10)*

In addition to enabling professionals to take on tasks once handled by others, AI has introduced entirely new areas of responsibility. This is evident in, for instance, SEO where AI tools enable marketers to scale content production and improve search rankings, which previously was unmanageable due to time or resource constraints.

> *"We have successfully improved our SEO optimization with the help of AI, so in a way, it has become a new area of responsibility because it was not previously possible to do" (Interviewee 11)*

Moreover, AI has made technical tasks more accessible. The technology has enabled marketing professionals to develop simple automation processes and basic software solutions without advanced programming skills. This has reduced the reliance on external support, giving marketing professionals more autonomy in executing their ideas. As one interviewee described, AI has given them the ability to experiment and develop their own solutions.

> *"Personally, for me, a big thing has been the ability to implement various things that I would have previously left undone because they were too labor-intensive or expensive. Now, with just a basic understanding of coding, I can create fully functional solutions myself, as well as small tools for my own use, thanks to the AI assistant." (Interviewee 3)*

4.2.3 New roles and tasks

Alongside changes in responsibilities, the interviews also revealed that the integration of AI has started to change job roles. In some cases, marketing professionals have taken on entirely new AI-related tasks that were not originally part of their role. This shows that AI is assisting with existing work but also changing the structure of work and what is expected from employees. One interviewee described how a member of their team became involved in AI development across the company, leading to alterations in their role. This individual was assigned new tasks related to voice model development, a responsibility that had not been part of their initial job description.

> *"One of my team members is now involved in company-wide AI development, so their role has changed somewhat. They have taken on this area as a completely new part of their work and are working on developing various voice models. In fact, they have been involved in developing many things beyond their original area of responsibility, so their role has changed quite significantly." (Interviewee 7)*

Furthermore, as automation reduces manual tasks and AI tools are shaping work processes, managers' tasks increasingly consist of coaching, providing support, and guiding employees through the changes. For instance, an interviewee explained that their leadership responsibilities have evolved beyond merely communicating strategy and setting direction. In the past, it may have been enough for them to outline objectives and expect employees to execute tasks. However, as AI is increasingly leveraged, employees need more reassurance, encouragement and support to adapt to the new ways of working. Thus, the role of managers is shifting towards being a mentor, coach and emotional support person, rather than merely a decision maker.

> *"What has brought me a new kind of responsibility is that leadership itself has changed. More and more, I have to take on the role of a motivator, coach and emotional support for my team. It's no longer enough for me to just say, 'This is our strategy and this is the direction we're heading' and expect everyone to start executing. I can't rely on that anymore. Instead, I now spend half of my time making sure people have understood, and remind them that there's nothing to worry about." (Interviewee 5)*

Finally, the interview results suggest that AI is also creating informal roles within teams. This means that individuals who are more familiar with AI tools have become support people for colleagues who are less experienced with the technology. Although these roles are not official, they are an important part of AI adoption within teams.

> *"I had to take on sort of a ChatGPT support sole for our other employees." (H6)*

4.3 Emerging skill requirements

When discussing the impact of AI on marketing work, interviewees highlighted several skills marketing professionals need. Human-centric skills such as creativity, critical thinking, adaptability, and leadership skills remain essential, and technical skills are also becoming increasingly important. Moreover, marketing professionals are expected to

continuously learn and evolve. The following section explores the skills that are emerging in response to the integration of AI in marketing.

4.3.1 Prompt engineering

One of the most frequently mentioned skill in the interviews was prompt engineering or "prompting" which involves creating clear instruction that guide AI models to generate relevant outputs. Even though AI tools have improved over time and become more intuitive as well as easier to interact with, marketing professionals emphasized that prompting remains important in order to utilize AI's full potential.

> *"Prompting will certainly remain important in the future. The significance of prompting skills has diminished somewhat over time as the models have improved but the skill of prompting is still important, and its relevance remains clear." (Interviewee 1)*

Several participants described their own learning experiences with prompting as something that took time to understand in order to do it effectively. Initially, limited understanding of how to phrase or structure prompts prevented them from fully leveraging the tools. However, after gaining practical experience and utilizing the tools to refine prompts, interviewees began to see the benefits.

> *"Only after I realized how it [prompting] actually needs to be done did I start seeing the real benefits. Before that, I had been using it without fully understanding it. Once I began using AI to create and improve my prompts, I was finally able to genuinely and effectively utilize it." (Interviewee 8)*

In addition to practical experience, the interviews revealed that effective prompting requires an understanding of how AI models, particularly neural networks, work. According to an interviewee, good prompting goes beyond typing simple questions. It demands deeper knowledge of how the model interprets and responds to the inputs. This awareness helps marketing professionals create more correct, reasonable and varied outputs.

"When guiding it yourself, you really need to understand how the neural network works, so prompting is still central today. It actually took quite a while to get the hand of it. If you know how to ask the right things in the right way from the neural networks, then you will also get correct, reasonable and diverse answers." (Interviewee 2)

4.3.2 Continuous learning

Another important skill that emerged during the interviews is the ability and willingness to continuously learn. Participants emphasized that as AI becomes more embedded in marketing work, professionals must constantly update their knowledge to keep up with new tools and features. AI technologies and the platforms that utilize them are evolving, meaning that learning cannot be seen as a one-time thing, but instead an ongoing part of the job. Relying on old methods is no longer enough. Failing to adapt can result in falling behind.

"AI is continuously being integrated into the software used by various marketing professionals, so you must constantly learn how to use all the new features being added to these tools." (Interviewee 10)

"You must constantly learn new things. Our field is one where everything is always changing. There's a need and almost an obligation to adapt; you can't get stuck doing things the old way, like creating traditional print advertising." (Interviewee 4)

4.3.3 AI proficiency

The increasing adoption of AI in marketing has made it necessary for professionals to know how to use AI tools. Hence, AI proficiency is becoming essential. It is shifting from being a specialized skill to a basic requirement. Interviewees highlighted that certain job positions, particularly those heavily involved in AI-driven projects, require advanced understanding of the technology. These roles require individuals who possess extensive knowledge, allowing them to implement AI tools across organizations.

> *"It requires that the people who end up in these roles understand AI very well. Currently, we only have a few individuals who truly live and breathe AI and who could confidently go anywhere in the world to speak about it. That kind of deep expertise is certainly necessary." (Interviewee 7)*

In addition to advanced expertise, a basic understanding of AI is necessary for marketing specialists more broadly. Interviewees suggested that marketers should possess enough knowledge to independently implement and manage AI tools in their work. This reflects the growing expectation for professionals to understand not just how to use AI but also how AI operates and impacts marketing. The increasing need for AI proficiency is also becoming visible in recruitment processes. An interviewee pointed out that job advertisements are beginning to set AI skills as a requirement or desired qualification.

> *"You need to be capable of understanding and implementing the tools yourself because no one else is going to do it for you. I would say that a basic understanding of AI is starting to become essential." (Interviewee 11)*

> *"If you now started looking at some open marketing job positions, you could already begin to see that AI proficiency is gradually being set as a requirement. I believe it is becoming a new norm. What could I say about this – it is almost necessary to already know how to utilize AI and maybe to use it as a tool, not in a way that does the work for you, but more in the sense that it acts as a sparring partner." (Interviewee 6)*

Moreover, the interview findings suggest that in addition to understanding how to use the technologies, marketing professionals should know how to gather and evaluate data used by AI systems. This indicates that knowledge of data collection and data quality assessment are emerging as essential skills. As a result, marketing professionals must comprehend where data comes from and whether it is correct.

> *"You also need to understand data collection: where the data comes from, is there enough of it, is it based on accurate data. For example, we're interested in consumer behavior on websites, and we need to make sure we're collecting sufficient, high-quality data on that." (Interviewee 3)*

4.3.4 AI literacy

Furthermore, another skill that emerged from the interviews was AI literacy, particularly in relation to critical thinking and the responsible use of AI tools. Participants emphasized that marketing professionals must learn to evaluate AI-generated content with a critical mindset because accepting everything the tools produces may be problematic when it comes to information accuracy and content authenticity. Source criticism, or being critical of where information comes from, is essential to make sure content is not false and misleading.

> *"Just like there is media literacy, there also needs to be a bit of AI literacy, meaning that you can't just believe everything AI generates to be the truth." (Interviewee 6)*

In addition to making sure AI produced content is accurate, some interviewees expressed concerns about over-relying on the technology. They noted that depending too much on these tools could lead to outputs that are overly generic and lack human touch. As AI-generated content becomes more common, being able to distinguish between authentic content and something that is created without human input is considered increasingly important.

> *"Responsible use and utilizing one's own judgement are important. I see quite often, for example, on social media, small business owners who have discovered the wonders of AI and ChatGPT, but you can immediately tell from their posts that they were generated by AI even down to the emojis. This is what I mean by responsible use." (Interviewee 9)*

4.3.5 Creativity

As AI technologies are becoming increasingly accessible, utilizing the tools is no longer a way for marketing professionals to differentiate themselves or their brands. Simply utilizing AI tools no longer guarantees a competitive advantage as most companies already integrate them into their processes. Therefore, marketing professionals must provide

something extra, such as original ideas or personal perspectives, to ensure their content stands out. For this reason, interviewees identified creativity as an important skill for marketing specialists.

> *"I feel that creativity, which in general is beneficial in marketing, is becoming even more crucial now that AI is involved. You have to add something unique of your own because you no longer stand out simply by using AI. Now, creativity is definitely important." (Interviewee 8)*

> *"If you just mindlessly follow what ChatGPT or any other [AI] providers, then the production becomes generic." (Interviewee 2)*

Furthermore, interview results suggest that success in the future can depend on the ability to create unique content that AI alone cannot generate because the amount of AI generated content is likely to increase. Individuals who can deliver authentic and original ideas will become valuable. Moreover, knowing the platforms where consumers interact is important in order for marketers to leverage their creative skills to reach and influence the target groups.

> *"If all content is someday created by AI, then having some people who can create authentic things, that are truly unique and not invented by others, will make you stand out. – – You need to be creative and understand the channels where consumers spend their time, so regardless of which marketing area you are in, creativity is really important" (interviewee 11)*

4.3.6 Courage and curiosity

Furthermore, interview findings suggest that successful AI adoption also depends on marketing professionals' attitudes and willingness to engage with the technology. Interviewees emphasized that genuine interest, curiosity and courage to experiment are important traits for effectively integrating AI into marketing tasks.

> *"It requires interest and the courage to experiment, as well as curiosity to delve into it and all these kinds of basic things." (Interviewee 1)*

The interviews also brought up the importance of mindset when navigating change. While participants acknowledged that AI can raise concerns, such as fears of job loss, they also noted that it is essential to adopting a positive outlook. Rather than viewing AI as a threat, interviewees encouraged seeing it as a tool that can support and improve marketing work if one has the right mindset.

> *"Overall, a shift in mindset is needed to one where there is no fear of AI, even though there are concerns. However, there shouldn't be a fear that AI will take jobs or anything like that. Instead, it is important to maintain a positive attitude toward it although change is always a bit daunting, but perhaps the focus should be on how this can be beneficial." (Interviewee 4)*

4.3.7 Strategic thinking, human understanding and leadership

The interviews also brought attention to the importance of human-centered and strategic skills in the context of AI adoption in marketing. Several participants emphasized that while AI can support a wide range of tasks, it does not replace the need for skills, such as understanding human behavior, interpersonal communication, leadership, and strategic thinking. The ability to see the bigger picture and understand how different parts are connected is essential when deciding how and when to integrate AI. Marketing professionals are expected to assess not only where AI can add value, but also when human input is still necessary. Making these judgments requires strategic thinking as well as an understanding of the context into which AI is applied.

> *"Particularly human understanding, interpersonal skills, and of course, leadership skills. Also, the ability to think strategically, to see the bigger picture and how different elements are connected, and especially to identify where and when it is most beneficial to leverage AI" (Interviewee 8)*

Additionally, leadership plays an important role in AI adoption. According to interviewees, managers in the marketing field must not only possess knowledge and skills related to AI but also understand its capabilities and limitations. Successful AI implementation

is not about making AI the foundation of all business operations but rather about strategically identifying where it can be effectively leveraged according to interviewees. Strong leadership ensures that AI is applied in a way that enhances business strategy and simultaneously guides and supports employees through the transition. This requires the ability to manage people in an evolving technical landscape.

> *"Leadership has the skills and expertise to understand AI, including what it can and cannot do. However, AI is not used as the foundation for the entire strategy and operations. Instead, the right areas where AI should be utilized are identified, and leaders know how to manage its implementation effectively." (Interviewee 8)*

4.3.8 Understanding customer journeys

Finally, in the context of evolving skill requirements, an interviewee discussed the increasing importance of understanding the complexity of today's customer journeys. Regardless of whether AI tools are used or not, knowing the target audience and their behaviors across different stages of the buying process is considered essential. The interviewee pointed out that modern marketing is characterized by a rapid transformation in how and where consumers engage with content and failing to comprehend this can limit the effectiveness of marketing.

> *"Whether you use AI or not, today's world, or today's marketing, is very much characterized by the complexity or multi-stage nature of the purchasing journey of professionals and consumers, as well as understanding the target audience." (Interviewee 10)*

The ability to grasp how purchasing patterns have changed especially over the past decade and how they continue to evolve is seen as a core skill. In addition, marketing specialists must be aware of the growing number of channels through which consumers can be reached and be able to identify where their specific audience is active. This awareness and adaptability to change in consumer behavior and media landscapes are crucial whether AI is involved in the process or not.

"Nowadays, it is quite difficult to do marketing and advertising without understanding how the customer journey has changed let's say over the past 10 years and how it continues to change very rapidly, as well as the fact that new channels for reaching target audiences are constantly emerging." (Interviewee 10)

4.4 Perceptions of the future

Lastly, the perception of the future of marketing was discussed during the interviews. A common belief is that AI will not fully replace humans in future marketing roles, although it is expected to take over certain tasks and responsibilities. Another common consensus was that the technology is likely to further reshape existing job roles and responsibilities. Many believe that more routine and repetitive tasks, often referred to as "bulk work", will be automated and replaced by AI, which on the one hand enables professionals to focus more on strategic and creative tasks, but on the other hand increases the risk that individuals with limited expertise or an unwillingness to adapt may be replaced by technology.

"In the future, bulk work will suffer very much. – – These tools that exist, they change the nature of bulk work so that inevitably one can no longer compete in the job market with just basic level scriptwriting skills." (Interviewee 2)

"If you are a better copywriter or better at coming up with different solutions in general and able to find good implementation for various situations, and you are better at communicating with the customer, all of these things will surely become significantly more important because those are the things that will likely be left for us to do." (Interviewee 1)

"Well, I could imagine AI doing completely what I did, if I'm being honest. At some point, I am absolutely sure that an AI software can be created, which uses pre-given/planned texts and selects an image and creates a [social media] post by itself." (Interviewee 6)

4.4.1 New roles and responsibilities

As stated, the findings suggest that the AI is not only changing current marketing tasks but also expected to influence how roles and responsibilities evolve at the strategic and operational level in the future. A clear shift identified was the need for cross-functional leadership, a role that currently does not exist in most organizations. As one interviewee noted, an individuals who can objectively oversee AI implementation across the organization without being limited by departmental silos is missing. In the future, roles that cut across departments are expected to emerge, enabling broader coordination and integration of AI tools.

> *"I think that a cross-organizational role does not currently exist... someone who would examine AI impartially and without silos." (interviewee 5)*

Alongside the need for broader oversight roles, interviewees identified an importance for analytical positions that are focused on AI. The need for analysts with specialized knowledge in AI and data analysis is expected to increase, particularly as organizations want to make sure that data is accurate. These individuals will not only need to possess technical skills but also a strong understanding of source criticism.

> *"The role of analysts will become more prominent and defined, and there will likely be a need for some kind of AI – not necessarily specialized – but at least focused analysts. And also, it brings a whole new level of source criticism." (Interviewee 7)*

Interviewees also acknowledged the rise of specialized roles, such as AI strategists and prompt engineers. As AI technologies begin to produce content more autonomously without human oversight, individuals who are capable of designing effective prompts for text, image and video creation will become increasingly valuable. At the same time, organizations may need AI contract and compliance specialists that are responsible for negotiating with large AI providers, managing regulatory compliance and developing internal AI solutions that meet privacy standards. An interviewee acknowledged that these positions do not exist widely yet but anticipate demand for such experts in the near future.

> *"AI strategist definitely sounds like the right kind of role, and I also think there will be demand for prompt engineering specialists, meaning people who are specifically skilled in creating prompts, whether for images, videos, text or all of them." (Interviewee 8)*

> *"In the future, there will certainly be talk of AI contract specialists who negotiate with major providers, so going to them and demanding, for example, custom AI agents for our company, because due to GDPR and other data protection obligations, we can't just allow like OpenAI to dig through all our data." (Interviewee 8)*

AI adaptation is additionally believed to create new teams. In larger organizations, especially, interviewees predict the formation of dedicated AI teams that focus on identifying opportunities for automation, improving efficiency and aligning AI initiatives with marketing goals. In smaller organizations, such responsibilities may be assigned to a single person or become a part of an existing role.

> *"It is possible that in larger organizations, entirely new teams will emerge, which are just AI teams that focus solely on how to maximize the benefits of AI and how to automate certain processes. – – We have a small team, but it might be that we choose one responsible person who will handle the AI" (Interviewee 4)*

Interviewees also pointed out that existing marketing roles will evolve. For instance, traditional SEO specialists may need to evolve into AI optimizers who understand how to optimize not just for search engines such as Google but also for AI-powered tools like ChatGPT. This includes knowing how to ensure brand visibility in AI-generated recommendations and understanding new channels.

> *"Entirely new roles may well develop from existing ones, for example, the role of a search engine optimizers. The market may change to the extent that simply understanding Google is no longer enough; one must also understand how to get featured in ChatGPT's recommendations. If someone asks it, for instance, what shoes to buy for this winter, you need to know how to appear in those results. So, a role like an AI optimizer is likely to emerge." (Interviewee 3)*

Finaly, some participants presented concerns regarding AI's impact on the job structures within marketing teams. As the technology begins to execute routine and entry-level

tasks, junior positions may become less common. In contrast, senior professionals are expected to take on more responsibilities in supervising AI tools and ensuring they align strategically with goals.

> *"I personally see the trend leaning more towards existing roles gradually changing form where the number of junior positions may start to decrease overtime. Meanwhile senior professionals can be put to more effective use." (Interviewee 1)*

4.4.2 Autonomous AI agents and assistants

Moreover, a recurring theme in the interviews was the anticipation of autonomous AI agents, which are viewed as a likely next step in the evolution of AI tools. Rather than solely assisting humans in specific tasks, these agents are expected to take on more proactive and decision-making roles in marketing. For instance, rather than hiring a marketing analyst, some organizations may in the future rely on an AI agent that is trained to analyze campaign performance, draw insights from data and even recommend the next steps. Nevertheless, these systems would still require human oversight, particularly to set them up and monitor quality control.

> *"Creating self-operating AI agents is certainly the next step, where they perform tasks autonomously." (Interviewee 3)*

> *"The AI would act as the marketing analyst but of course it would require a so-called working partner, meaning a human who builds it and oversees its quality, for example." (Interviewee 8)*

However, as these systems evolve, considerations about governance and structure emerge. Interviewees raised questions about whether AI agents would need to be developed for each specific marketing task, or whether general purpose agents could handle broader sets of responsibilities once given access to data. These questions point to a future where managing AI agents becomes a new responsibility.

> *"Then, as these AI agents, meaning systems that operate more autonomously, become more common, their management becomes an interesting question. Do we*

> *need a separate agent for every little task or will there be more general ones to which you can simply feed all the data and objectives, give a credit card and say, 'do marketing'." (Interviewee 3)*

Given the growing complexity and specialization of marketing needs, the ability to create dozens or even hundreds of task-specific AI agents is seen as both a possibility and a necessity. This, in turn, will create new managerial or strategic roles focused on overseeing and coordinating the agents to ensure consistency, efficiency and alignment with business objectives.

> *"Dozens, if not hundreds, of different types of agents can be created for various purposes, especially when there are clients from many different industries and various aspects within the marketing field. So, it's very possible that there will need to be a role that oversees them from a higher level." (Interviewee 3)*

Furthermore, in relation to AI agents, interviewees mentioned that target audiences will potentially change in the future. With the growing adoption of digital assistants like Alexa, Siri and others, marketing messages may increasingly need to be optimized not just for human consumers but for the AI systems that mediate their choices. In this scenario, brands must ensure that their content is discoverable and favorable to human users as well as the AI intermediaries that influence what information gets surfaced.

> *"Currently we are selling to people, meaning consumers but in the future, we will be selling to AI or machines. People are increasingly using these digital assistants. They ask, for example, "Alexa what's the weather like now?" or "Can Siri recommend a romantic movie to watch today?" (Interviewee 8)*

In order to respond to this shift, companies may begin to create their own internal AI agents to interact with external ones. These agents would act as intermediaries, communicating with third-party systems and delivering data or instructions in a controlled and secure manner. The shift would not only introduce new technical demands but also modify communication flows within and between organizations.

> *"We need to build our own AI agents that then communicate with the external AI agents and provides inputs, which will certainly bring new skill requirements." (Interviewee 8)*

Additionally, an interviewee noted that if clients and themselves adopt AI systems, communication between them and their customers may eventually occur directly between AI agents. For example, AI-generated reports might not be read by humans anymore on the customer's side, but instead by AI assistants. This would represent a major shift in the way marketing activities are carried out, meaning that there would be an alteration towards a more automated and self-sustaining ecosystem where AI agents communicate, share information and execute tasks with minimal human involvement.

> *"It's also a quite funny thought that if AI writes all the reports and such, and then AI assistants are implemented on the client side that end up reading the report, and then these systems run quite independently like that." (Interviewee 3)*

4.4.3 Brand visibility

An interesting insight brought up during the interviews is the growing importance of brand recognition in an AI-driven marketplace. As digital assistants like Siri and Alexa are used more by consumers, the way people interact with products is expected to change. Instead of browsing and comparing items manually, consumers in the future are likely to use voice commands or automated systems to make purchasing decisions. Then, brands that are on consumers' minds and easily recognizable by name are expected to have a competitive advantage, since AI technologies rely on clear and direct input. An example that was given in an interview depicted that if a consumer asks a digital assistant to "add toothpaste" to their shopping list, it could result in a generic or algorithmically chosen product. However, if the consumer specifically requests a brand, that brand becomes directly integrated into the purchasing process. This illustrates how brand familiarity will play an important role in securing customer preference in automated retail environments.

"Brands will become significantly more important. For example, if you want to buy toothpaste and you just say "toothpaste", that is one thing—but if you say "Siri, add Colgate toothpaste to the shopping list", then as a brand, you are involved in a completely different way." (Interviewee 8)

4.4.4 Changing client expectations

In addition to changing marketing roles, the interviews also highlighted how AI may influence relationships between marketing professionals and their clients. One interviewee pointed out that as AI tools become more advanced and accessible, some tasks traditionally outsourced to marketing agencies could be handled internally by customers. For example, tasks like ad creation or content production, which have required external expertise, might be done by in-house marketers or even non-marketing staff with the help of AI in the future. This could reduce the need for external marketing services. Hence, marketing agencies will need to rethink their value proposition by shifting their services from routine tasks to emphasizing strategic support, consultancy and high-level marketing expertise, rather than only operational services.

"The customer's own marketing person or even someone else might be able to handle things like advertising or other individual tasks so it's possible that some of the work will decrease in certain areas. That's also why we need to change ourselves, so that our value creation is more focused on the strategic side." (Interviewee 3)

4.4.5 Ethical challenges

Lastly, when discussing the future of AI in marketing, several interviewees raised concerns regarding ethical challenges and responsible usage. The technology's ability to generate targeted and persuasive content while having access to personal data from, for instance, social media platforms, can raise questions about how personal data is used. A participant described this potential as a "psychological atomic bomb" to emphasize AI's power to manipulate if used irresponsibly. Furthermore, the potential for misuse increases when advanced tools can create precise sales messages and personalized

targeting based on individuals' behavioral data, which puts a lot of responsibility on those who design and apply the systems now and in the future.

> *"If we have this kind of powerful tool that can precisely craft messages from a sales perspective, and we also have access to personal data from social media, then I think we are facing something like a psychological atomic bomb. The one who has the tools to misuse that carries a significant responsibility." (Interviewee 2)*

The findings presented in this chapter have been gathered into the theoretical model presented in **Figure 8**. The results depict how AI is reshaping marketing by no longer being an emerging tool but a force that changes task, roles, responsibilities as well as skill requirements. Furthermore, the technology's increasing presence in the field is shifting the perceptions of the future of marketing work.

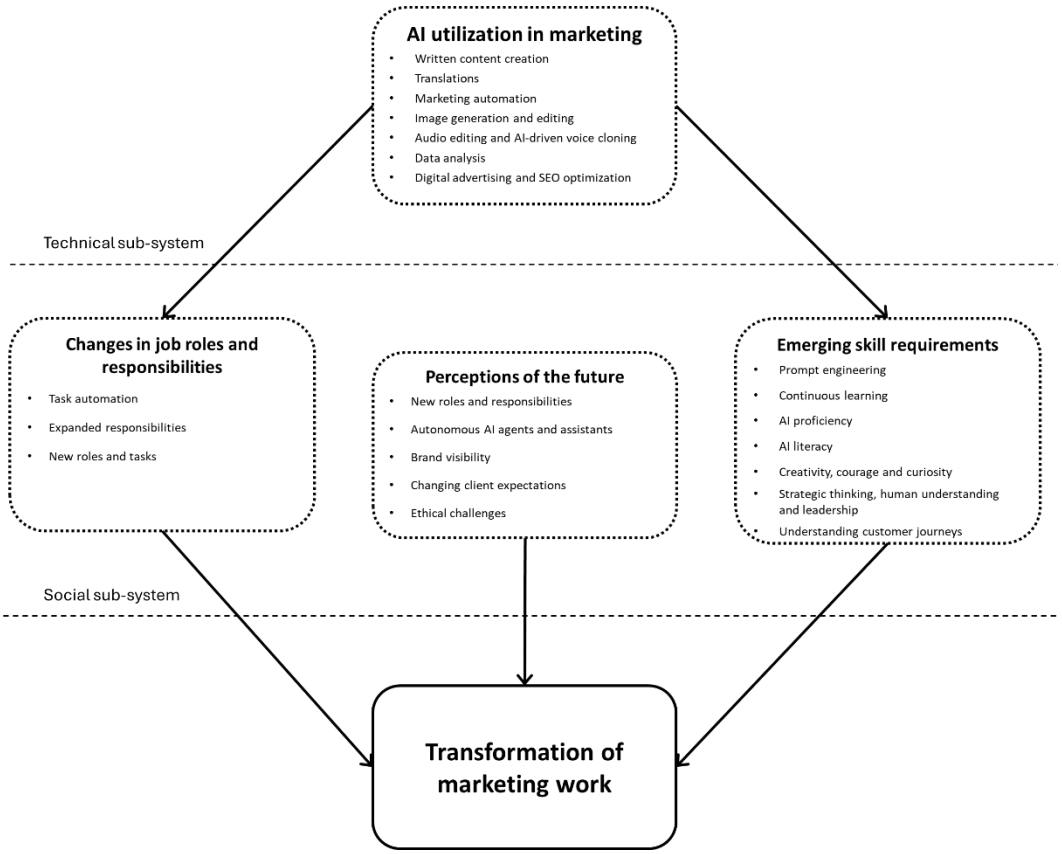

Figure 8. Aspects affecting the transformation of marketing work.

5 Conclusions

This chapter concludes the main findings of the thesis by answering the research question. In addition, it outlines the theoretical contributions by comparing the results of the study with theory presented in the literature review. Managerial implications are also proposed based on the findings. Lastly, the chapter presents suggestions for future research as well as the study's limitations. The aim is to synthesize the main findings while outlining their practical relevance and potential contributions to future research.

5.1 Summary of results

Answering the research question, "*How is the integration of AI transforming job roles, skill requirements, and work tasks in the marketing field, and what implications does this have for the future of marketing work*?" can be done by examining it through the thesis's four main areas. Firstly, the findings suggest that AI is widely utilized in marketing for a variety of tasks including content creation, translations, automation, image and audio editing, data analysis and digital advertising. Across these applications, the technology is mainly used as a supportive tool that helps with executing tasks, but it still requires human supervision to make sure desired quality and strategic alignment are achieved. The most common ways of using AI in marketing were found to be content creation and translations, both of which are not yet fully trusted to AI and require human refinement, as the outputs may contain errors. Some repetitive tasks, such as campaign execution and customer communication, have been successfully automated. Image and audio editing, in turn, have become more accessible and efficient due to AI. Nevertheless, the technology's role in data analysis is still developing as early experimentation is occurring.

After understanding the ways AI is applied into marketing, it is easier to comprehend how it affects the roles, tasks and responsibilities of professionals. The findings show that AI has altered marketing work. For example, day-to-day tasks are being redefined as routine and repetitive work is increasingly automated. This allows marketing

professionals to spend more time on, for instance, creative, strategic and supervisory tasks. Some roles are shifting from execution-focused work to overseeing AI processes. Moreover, the technologies have expanded individuals' responsibilities by allowing them to perform tasks that before required specialized expertise such as graphic design or coding. In some cases, AI implementation has introduced new responsibilities that were unfeasible in the past due to the lack of resources or time. Additionally, new job roles have emerged as well as existing ones evolved.

Furthermore, as AI technology becomes more integrated into marketing, professionals need to develop broader skillsets. While creativity, continuous learning, adaptability, leadership, and strategic thinking skills remain essential, new competencies like prompt engineering and AI proficiency are increasingly required. Marketing professionals do not only need to know how to leverage AI tools but additionally understand to critically evaluate the content the tools produce. Furthermore, ethical judgement as well as data and AI literacy have become important to ensure responsible AI marketing. As producing content by the different tools and technologies becomes more common, the ability to be creative and original helps marketers stand out and differentiate themselves. In addition, the findings emphasized the ability to understand complex customer journeys regardless of whether AI is used as well as the importance of adaptability, curiosity and courage when adjusting to changes caused by AI.

Lastly, the findings concerning the future of marketing suggest that while AI is not expected to replace marketing professionals entirely, it will continue to shape their roles, tasks and responsibilities. Marketing professionals anticipate that routine work will become increasingly automated, making individuals adopt new competencies like strategic, creative and interpersonal skills. Furthermore, new roles are expected to emerge, while existing ones may evolve or disappear. In addition, the future of marketing may involve autonomous AI agents that require oversight and technical coordination. As the tools become more prevalent, client expectations may also change causing marketing professionals and agencies to alter their value propositions. Moreover, AI technologies are

expected to influence how consumers interact with brands in the future, which is why brand visibility may become even more essential. Finally, concerns about the ethical implications of AI use have been raised, especially in terms of data privacy and responsible communication. The above expectations emphasize the importance of adaptability, ethical awareness, and continuous skill development in the future of marketing.

5.2 Theoretical contributions

This thesis contributes to the literature on AI and the future of marketing work by extending the application of the Socio-Technical Systems (STS) theory (Bostrom & Heinen, 1977; Walker et al., 2008; Carayon et al., 2015) to explore the impact of AI on the marketing field. The findings justify and expand the STS model by demonstrating how the integration of AI into marketing reshapes the technical and social sub-systems of marketing work and how the relationship between the two components leads to new work configurations.

Firstly, the study supports the STS theory's principle of joint optimization, which emphasizes that achieving optimal outcomes requires balance between the technical sub-system, meaning AI, and the social sub-system, referring to marketing specialists (Walker et al., 2008). The findings provide practical examples of this synchronization, for example, by showing how marketing professionals balance tasks supported by AI, such as automation and content creation, with human supervision. This aligns with and extends the previous findings by Davenport and Kirby (2016) and Nitsch et al. (2024), who emphasize that AI augments rather than replace human labor, especially in human-centric tasks that require creativity. Furthermore, the mutual development of human roles and AI technologies illustrates the idea that technology does not operate in isolation but is influenced by and influences human behavior and work processes (Bostrom & Heinen, 1977).

Moreover, this thesis deepens the understanding of AI's impact on the future of work by confirming that job roles are predicted to evolve rather than be replaced entirely (Frey

& Osborne, 2017; Furendal & Jebari, 2023). The findings demonstrate the emergence of roles combining analytical skills and AI proficiency, such as prompt engineers, AI strategists and cross-functional positions, whose purpose is to integrate AI tools across organizations. These results contribute to the existing discussions on role alterations due to AI technologies, supporting the proposition by Raisch and Krakowski (2021) that roles are redefined instead of eliminated entirely.

Additionally, the study further contributes to literature on skill development (Di Gregorio et al., 2019; von Richthofen et al., 2022) by offering a more detailed understanding of the emerging skills marketing professionals need to navigate the adoption and use of AI technologies. The findings align with the World Economic Forum's (2020) report that highlights the importance of reskilling and upskilling, since continuous learning was noted as an essential skill. Moreover, other skills identified as important include AI literacy, ethical judgement and prompt engineering. These support Di Gregorio et al.'s (2019) categorised skills but also build on existing research by highlighting the demand for roles that merge technical knowledge with human-centered capabilities, such as emotional intelligence and ethical decision-making (Robles, 2012; Shen, 2024).

Finally, this thesis contributes to the discussions on the future of work by supporting predictions about the restructuring of job roles in response to AI integration (Davenport et al., 2020; von Richthofen et al., 2022; Shen, 2024). The findings validate that AI does not only automate tasks but also creates demand for new types of work, which aligns with Moretti's (2010) proposition that each new technologies can create new complementary roles. These results support the understanding that AI does not only change individual roles but also influences how organizations are structured, increasing the need for skills like flexibility, cross-functional collaboration and continuous adaptation. This aligns with the STS theory, which implies that technological change affects social systems (Bostrom & Heinen, 1977; Carayon et al., 2015, p. 550).

5.3 Managerial implications

In addition to the theoretical contributions, the results provide several suggestions for managers. First, the evolving role of marketing specialists suggests that managers should think about talent development as well as workforce planning. Since AI automates routine tasks, marketers will need to focus on strategic, creative and analytical work. Hence, managers should support upskilling to ensure their teams can leverage AI. In order to guarantee employees' AI proficiency, employers should create opportunities for them to experiment with the tools.

Moreover, leadership styles will need to change to adapt to the AI-driven alterations. Managers should support and coach their employees to adopt AI tools and foster confidence in their usage. The ethical and governance aspects of AI should be taken into consideration in decision making. Furthermore, the emergence of AI champions within marketing teams suggests that managers should embrace these individuals to share their knowledge.

Finally, since the technology is expected to potentially reduce the need for traditional marketing agency services by enabling in-house teams to complete tasks with AI, managers must reassess their company's operations, job roles and team structures. AI should not compromise innovation, personalization or the human touch in marketing. Those who are able to balance AI with human expertise will thrive in the evolving marketing landscape.

5.4 Suggestions for future research

Future research could benefit from a larger sample size because it could enhance the generalizability of the findings. Expanding the study to include marketing professionals from different industries and geographical regions would also deliver a broader

understanding of AI adoption in the field. Investigating how AI is utilized in marketing on a global scale could offer greater insight into its impacts.

Additionally, conducting a longitudinal study instead of a cross-sectional study would provide researchers an understanding of how AI's role in marketing evolves over time. As the technology develops, tracking changes in job roles and responsibilities as well as skill requirements over a number of years could help assess the long-term impact of the technology. Moreover, a mixed-method approach that combines qualitative and quantitative methods could also be utilized in future research. Conducting surveys or analyzing AI usage data could additionally provide measurable evidence of AI's effects on marketing. This could assist in supporting trends observed in qualitative studies and offer a more comprehensive perspective on AI integration.

5.5 Limitations

Although this thesis provides insights into the roles of AI in the marketing work, certain limitations should be acknowledged. First, the study relies on qualitative interviews with marketing professionals, which offer an in-depth perspective on the subject but may limit the generalizability of the findings. Since the sample consists of 12 interviewees, the study captures individual experiences and professional views but might not fully apprehend the diversity of AI adoption across the field. Furthermore, as the interviews were conducted on individuals based in Finland, the findings are limited to a single geographical region. Some of the findings may be relevant in broader contexts, however, marketing work in other countries may be affected by different technologies, marketing processes and attitudes towards AI, which is why the findings may not apply everywhere.

Another limitation is the development of AI technologies. As new tools, capabilities and industry applications continue to advance, some of the findings may quickly become outdated. The interviewees' perspectives reflect the current state and future predictions of AI in marketing at the time of the interviews, however, the constant developments

may lead to new outcomes that were not addressed in this study. Moreover, since AI technologies are new and evolving, some interviewees did not fully comprehend the long-term implications of the technology on marketing work, which limits the depth of understanding of what might happen in the future. Finally, the research does not include a quantitative component meaning that while it provides valuable qualitative data, it does not offer statistical validation of trends in AI adoption.

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Appendices

Appendix 1. Interview questions

Pro gradu -tutkielman haastattelukysymykset / Noora Barry, Vaasan yliopisto

Tutkielman aihe: *The Role of AI in the Future of Work: Insights from the Marketing Field*

a. Pohjatiedot

i. Kerro lyhyesti roolistasi ja työtehtävistäsi?

b. Tekoälyn käyttö työssäsi

i. Mitä tekoälytyökaluja käytät tällä hetkellä ja mihin työtehtäviin niitä hyödynnät?

ii. Miten olet vuorovaikutuksessa tekoälytyökalujen kanssa päivittäisessä työssäsi? Kuvailisitko vuorovaikutusta yhteistyöksi, vai toimiiko tekoäly pääosin autonomisesti eli ilman ihmisen jatkuvaa ohjausta?

iii. Kuinka kauan olet hyödyntänyt tekoälyä työssäsi?

iv. Miten tekoälyn käyttö työtehtävissäsi on kehittynyt viimeisen muutaman vuoden aikana?

c. Muutokset työtehtävissäsi

i. Ovatko työtehtäväsi muuttuneet tekoälytyökalujen käyttöönoton myötä? Jos kyllä, miten?

ii. Oletko saanut uusia vastuualueita tekoälyn käyttöönoton myötä? Jos kyllä, millaisia?

iii. Millaisia uusia toimenkuvia tai erikoistumisalueita uskot syntyvän markkinointialalle tekoälyn käytön lisääntyessä (esim. data-focused marketing analysts, AI strategists yms.)?

d. Taidot ja osaaminen

i. Millaiset taidot koet tärkeäksi tekoälytyökalujen kanssa työskentelevälle markkinointialan ammattilaiselle?

ii. Millaisia muita taitoja ja osaamista markkinointialan ammattilaisilta vaaditaan tekoälyn aikakaudella?

iii. Ovatko taitovaatimukset mielestäsi muuttuneet viimeisen viiden vuoden aikana? Jos kyllä, miten?

e. Tulevaisuus ja pohdintaa

i. Miten arvioit tekoälyn vaikuttavan markkinointialan tulevaisuuden työtehtäviin ja taitovaatimuksiin?

ii. Miten uskot tekoälyn vaikuttavan omaan työrooliisi tulevina vuosina? Onko työssäsi osa-alueita, joita tekoäly voisi muuttaa tai jopa korvata kokonaan?

iii. Minkälaisia hyötyjä ja haasteita tekoäly mielestäsi luo?