AI-POWERED MARKETING AUTOMATION: EXPLORING THE FACTORS AFFECTING IMPLEMENTATION IN A LARGE COMPANY

**Jyväskylä University
School of Business and Economics**

Master's Thesis

2024

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Subject: Marketing
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ABSTRACT

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Title	
AI-powered marketing automation: exploring the factors affecting implementation in a large company	
Subject	Type of work
Marketing	Master's thesis
Date	Number of pages
3/2024	79
Marketing automation has firmly established itself as a necessary technology in marketing, and artificial intelligence (AI) seems to introduce novel opportunities to enhance the system even further. Integrating AI and marketing automation creates benefits for marketing, such as more efficient data processing, predictive analytics, automated targeting, and improved optimization of content and channels. Therefore, this study aims to increase the understanding of AI-powered marketing automation and its implementation. The objective is achieved through a case study conducted in a large company implementing an AI-powered marketing automation system to replace its previous system. The theoretical foundation encompasses literature reviews on marketing automation, AI in marketing, and marketing technology implementation. The findings of this study illustrate how AI changes the different features of marketing automation and explain the concept and operational logic of AI-powered marketing automation. Furthermore, the study identifies the factors that enable or impede its implementation in the planning, communication, and evaluation phases. The findings highlight employees' central role in AI-powered marketing automation implementation. In addition to technical and analytical competence, the system requires employees to trust that AI's algorithms can allocate the optimal content to the right customers in the right channel at the right time. Additionally, the study proves that customer data is another critical factor supporting AI-powered marketing automation implementation. The system needs a vast amount of quality customer data to operate optimally and provide accurate personalization. Therefore, data management processes should support the implementation. This study contributes to the knowledge of AI-powered marketing automation systems by identifying the factors that should be considered during the implementation. It also offers practical insights for businesses planning to harness AI into their strategic marketing execution.	
Keywords	
marketing automation, artificial intelligence (AI), AI-powered marketing automation	
Place of storage	
Jyväskylä University Library	

TIIVISTELMÄ

Tekijä	
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Työn nimi	
Tekoälypohjainen markkinoinnin automaatio: käyttöönottoon vaikuttavien tekijöiden tarkastelu suuressa yrityksessä	
Oppiaine	Työn laji
Markkinointi	Pro gradu -tutkielma
Päivämäärä	Sivumäärä
3/2024	79

Markkinoinnin automaatio on vakiinnuttanut asemansa markkinoinnissa, ja tekoäly luo uusia mahdollisuuksia järjestelmän käytön tehostamiselle. Tekoälyn hyödyntäminen markkinoinnin automaatiossa mahdollistaa esimerkiksi tehokkaamman datankäsittelyn, ennakoivan analytiikan, automatisoidun kohdentamisen, sekä sisällön ja kanavien osuvamman optimoinnin.

Tämä tutkimus pyrkii lisäämään ymmärrystä tekoälypohjaisesta markkinoinnin automaatiojärjestelmästä ja sen käyttöönottoon vaikuttavista tekijöistä. Työ tutkii aihetta tapaustutkimuksen avulla suuressa yrityksessä, jossa otettiin käyttöön uutta tekoälypohjaista markkinoinnin automaatiota aiemman järjestelmän tilalle. Työn teoreettinen perusta rakentuu markkinoinnin automaatiota, tekoälyn hyödyntämistä markkinoinnissa ja markkinointiteknologian käyttöönottoa käsittelevästä kirjallisuudesta. Tutkimuksen tulokset havainnollistavat, miten tekoäly muuttaa markkinoinnin automaation ominaisuuksia sekä selventää tekoälypohjaisen markkinoinnin automaation käsitettä ja toimintalogiikkaa. Lisäksi se tunnistaa tekijöitä, jotka mahdollistavat tai estävät järjestelmän käyttöönottoa suunnittelu-, kommunikointi- ja arviointivaiheissa.

Tulokset korostavat työntekijöiden keskeistä roolia tekoälypohjaisen markkinoinnin automaation käyttöönotossa. Järjestelmän käyttöönotto edellyttää teknisen ja analyyttisen osaamisen lisäksi luottamusta tekoälyn kykyyn kohdentaa optimaalista sisältöä oikeille asiakkaille oikeaan aikaan ja kanavaan. Asiakasdatan tarve on toinen keskeinen tekijä, joka tukee tekoälypohjaisen markkinoinnin automaation käyttöönottoa. Järjestelmä tarvitsee paljon laadukasta dataa toimiakseen optimaalisesti. Siksi on tärkeää varmistaa käyttöönottoa tukevien tietojenhallintaprosessien toimivuus. Tämän työ lisää ymmärrystä tekoälypohjaisen markkinoinnin automaatiojärjestelmän käyttöönotosta. Lisäksi se tarjoaa käytännön näkökulmia yrityksille, jotka suunnittelevat hyödyntävänsä tekoälyä osana strategista markkinointiaan.

Asiasanat	
Markkinoinnin automaatiojärjestelmä, tekoäly, tekoälypohjainen markkinoinnin automaatiojärjestelmä	
Säilytyspaikka	
Jyväskylän yliopisto	

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1 INTRODUCTION

Digitalization has changed consumers' behavior significantly during the last decades. In addition to computers, mobile devices allow immediate access to the internet regardless of location and time, reshaping how individuals interact with information, entertainment, products, and services (Chaffey & Ellis-Chadwick, 2019). Simultaneously, social media has made it possible for everyone to create and share content, transforming how consumers engage with brands. Altogether, digitality and automation have become part of consumers' everyday lives (Lahtinen, Pulkka, Karjaluoto & Mero, 2022).

The transforming business environment and consumers' changing buying behavior have forced companies to revise how they interact and communicate with their audience. Businesses face increasing marketing channels, empowered customers, vast amounts of data, and short reaction times (Keens & Barker, 2009). Thus, new technologies are increasingly relied on to meet customers' changing needs, and companies are moving away from mass advertising, such as print, TV, and radio, towards more personalized and experiential marketing (Biegel, 2009; Lahtinen et al., 2022).

Marketing automation is one of the technologies that help to create marketing effectiveness and efficiency (Biegel, 2009). The number of different marketing automation software providers is continuously growing, and it has become a promising technology for companies operating in both business-to-business (B2B) and business-to-consumer (B2C) sectors. Marketing automation providers are proposing significant benefits from adopting the software. However, many companies struggle to implement the system successfully and achieve its full benefits. According to a survey by Ascend2 (2021), even 54 % of marketers felt that their marketing automation systems are not used to their fullest potential.

Marketing automation systems are often cloud-based Software-as-Service (SaaS) technologies, so the installation and set-up are technically easy (Siu, 2020). Nevertheless, it has been identified that implementing marketing automation is a complex process that requires changes in mindsets and organizational

operations (e.g., Järvinen & Taiminen, 2016; Mero, Tarkiainen & Tobon, 2020; Mero, Leinonen, Makkonen & Karjaluoto, 2022). Implementing new technology is challenging, especially in large companies where organizational processes and operations change slowly (Lahtinen et al., 2022).

Along with marketing technologies, the development of artificial intelligence (AI) has made enormous leaps during the past decade. Businesses are increasingly harnessing AI, and marketers benefit significantly from its data-driven approaches to collecting and providing worthwhile information (Huang & Rust, 2020). AI may enhance marketing activities such as the next-best customer offers, programmatic buying of digital ads, and predictive lead scoring (Davenport, Guha, Grewal & Bressgott, 2020). Furthermore, by integrating marketing automation and AI tools, businesses may reach their customers more efficiently in real-time and provide the right content for individual customers' current situations (Davenport et al., 2020). However, despite the promising benefits of AI-powered marketing automation, the complex features of AI challenge the marketing automation implementation process even more.

1.1   Objectives of the research and research questions

Marketing automation has been a much-discussed topic within marketing for years, but the academic literature is still limited. Fortunately, some studies of marketing automation exist, and they have shown that implementing marketing automation is a complex process that requires changes in mindsets and processes throughout the organization (e.g., Järvinen & Taiminen, 2016; Mero et al., 2022).

Murphy (2018) notes that the definitions of marketing automation do not yet include the more advanced features that AI could bring. However, integrating AI with marketing automation has not caught the broader attention of researchers. Anayat and Rasool (2022) reviewed 328 articles regarding AI in marketing and found that the focus of the studies has been on the use of AI in advertisement and customer relationship management (CRM). Furthermore, some studies have found that applying AI tools with CRM technologies can create advantages for organizations (Chatterjee, Rana, Tamilmani & Sharma, 2021; Gaczek, Leszczyński & Mouakher, 2023; Kumar, Ramachandran & Kumar, 2021). Still, the available articles regarding AI utilization with marketing automation are produced mainly by commercial vendors. According to the best of the author's knowledge, none of the existing research has yet discussed the implementation of AI-powered marketing automation. For this reason, there is a solid need to consider harnessing AI in marketing from the marketing automation perspective.

Against this backdrop, this thesis aims to expand the knowledge on implementing AI-powered marketing automation in the context of a large-scale company. The scientific goal of this study is to help fill the lack of marketing automation research by supplementing the previous studies with research about

AI-powered marketing automation implementation. In addition, the managerial goal of this study is to help managers understand the concept of AI-powered marketing automation and what organizational changes its implementation requires.

The gap in marketing automation research provides an opportunity to address the following primary research question:

How can a company implement AI-powered marketing automation?

Based on the goals of this study, the primary research question is supported by the following additional research questions:

How does AI-powered marketing automation change organizational operations?

What are the pitfalls when implementing AI-powered marketing automation?

The research will be conducted as qualitative research. Furthermore, the case study approach will be selected as a research method. The research context is a large-scale Finnish company operating in the financial industry. The data will be collected by interviewing the case company's employees and making observations.

1.2 Key concepts

The key concepts are briefly introduced to increase the understanding of the topics discussed in this study. These concepts include marketing automation, AI, and software implementation.

Marketing automation
Marketing automation is one of the most used tools within marketing (Lahtinen et al., 2022). It helps marketers automate marketing activities by delivering automatically personalized content based on the data and rules that the user has set (Järvinen & Taiminen, 2016; Lahtinen et al., 2022). The marketing automation provider HubSpot (2023) describes the technology as software that easily connects a business' marketing assets, data, and tools, helping to reach the customers at the right time and channel. The software provider proposes that along with a deeper engagement with the customers, marketing automation helps to reduce the gap between marketing and sales teams.

Although marketing automation is an interesting technology in today's marketing, it was already developed in the 1990s (Heimbach, Kostyra, & Hinz, 2015). The technology has its roots in B2B enterprise companies, but nowadays, B2C and B2B companies of all sizes extensively utilize marketing automation (Del Rowe, 2016; Heimbach et al., 2015). Datanyze (2023) lists more than 350

marketing automation technology providers, with HubSpot being the most prominent provider with over 38% market share. The other significant marketing automation providers are, for example, ActiveCampaign, Adobe, Oracle, and Salesforce. The success of marketing automation is expected to continue growing in the coming years, and the size of the global marketing automation market is forecasted to reach USD 8.42 billion by 2027 (Research and Markets, 2022).

Artificial intelligence (AI)

AI is changing both customers' behavior and companies' marketing strategies (Davenport et al., 2020). AI applies different technologies, for example, machine learning, that allow human-like activities, such as doing physical or mechanical tasks, thinking, and feeling (Huang & Rust, 2020; Kumar et al., 2021; Ma & Sun, 2020). Huang and Rust (2020) divide AI into three intelligences, including mechanical AI, designed for the automation of repetitive and routine tasks; thinking AI, designed for processing data to get conclusions or decisions; and lastly, feeling AI, designed for two-way interactions with humans and analyze their feeling and emotions. However, AI does not have actual feelings yet; instead, the feeling AI is based on different analyses of emotional and interaction data (Huang & Rust, 2020). Altogether, AI is a vast topic, including various technologies and methods. A comprehensive review of the characteristics of AI is beyond this study. Therefore, this paper briefly discusses common AI features and considers AI more generally, including its different technological characteristics, such as machine learning.

Technology implementation

Implementing new technology is a process that includes all the steps and actions that a functioning system requires in the organization (Damanpour, 1991). Several technology implementation models exist, but this study is limited to waterfall and agile models. Traditionally, the implementation process has progressed as a well-planned linear waterfall model (Lahtinen et al., 2022). However, the popularity of SaaS technologies has promoted agile implementation, which allows faster and more flexible implementation processes (Keens & Barker, 2009; Mero et al., 2020; Mero et al., 2022). The advantages of the agile implementation approach are that it enables companies to experiment with the new technology through pilot use cases and learn by doing instead of creating a detailed implementation plan (Mero et al., 2020; Mero et al., 2022). Nevertheless, technology implementation is influenced by multiple organizational, human, and technological factors that should be considered before and during implementation (e.g., Bush, Moore & Rocco, 2005; King & Burgess, 2008; Honeycutt, Thelen, Thelen & Hodge, 2005; Nguyen, Sherif & Newby, 2007).

1.3 Structure of the study

This study is divided into five chapters and is organized as follows. The first chapter is an introduction, where the research topic and background are introduced. In addition, the chapter presents the research questions and clarifies the study's goal.

The second chapter comprises the theoretical part of this study by reviewing the literature on AI, marketing automation, and technology implementation. This chapter discusses different perspectives of marketing automation literature and composes a marketing automation definition that will be adhered to in this work. It also clarifies the concept of AI-powered marketing automation. Furthermore, chapter two contains the organizational factors that impact marketing automation implementation and presents the main framework of this study.

Chapters three and four include the empirical part of this study. Chapter three presents the research methodology, including the data collection methods and the data analysis. This is followed by chapter four, which introduces the research results and composes the factors enabling and impeding AI-powered marketing automation implementation in the case company.

Finally, the fifth chapter contains the conclusions of the study. It presents the four theoretical contributions, managerial implications, limitations of this study, and possible further research areas. In this thesis, AI writing assistants are used to revise the text written by the author.

2 IMPLEMENTATION OF AI-POWERED MARKETING AUTOMATION

2.1 Marketing automation

The marketing environment has become fragmented. Increased competition and changing consumer behavior have forced marketers to find new ways to reach and communicate with their customers (Lahtinen et al., 2022). Fortunately, marketing technologies, such as marketing automation, have been developed to provide new opportunities for businesses to meet their customers' needs in the changing environment and gain a strategic advantage over competitors.

Although marketing automation is a hot topic among marketers, the academic literature on this subject is still limited. The earlier literature has primarily focused on explaining the marketing automation concept and its operational features (Bagshaw, 2015; Biegel, 2009). Similarly, Heimbach et al. (2015) clarify marketing automation by creating a general framework for the technology. At the same time, the literature review by Murphy (2018) provides a deeper understanding of the complex nature of marketing automation and identifies seven key principles of marketing automation success that should be considered during the different phases of the implementation.

Despite the limited nature of academic literature within the marketing automation context, a few noteworthy studies consider marketing automation an essential part of companies' strategic marketing. One of them is the case study by Järvinen and Taiminen (2016), which focuses on studying how content marketing can be used to achieve business benefits via marketing automation in a B2B context. With the marketing and sales funnel framework, they demonstrate how marketing automation can generate high-quality leads by delivering behaviorally targeted and personalized content in different stages of the customer's journey. Their results increase the understanding of which

organizational processes support marketing automation usage as a part of the company's content marketing strategy. In addition, the study highlights how marketing and sales processes should be aligned to gain business benefits.

A comparative multiple-case study by Mero et al. (2020) found that even large-sized B2B companies move back and forth between causal and effectual reasoning while adopting marketing automation. Their results agree with the study by Järvinen and Taiminen (2016) that implementing marketing automation is a complex process requiring changes in organizational operations. Furthermore, Mero et al. (2020) identified five key domains of marketing automation (customer knowledge, information systems infrastructure, analytics, interdepartmental dynamics, and change management) that should be emphasized and developed.

Lastly, the study by Mero et al. (2022) complements the previous literature by focusing on agile SaaS implementation. The study agrees with the findings of Mero et al. (2020), who recognized the adoption of marketing automation as a flexible and dynamic process. In their four-year qualitative case study, Mero et al. (2022) examined the implementation of HubSpot marketing automation software in the context of a B2B start-up company. Their paper conceptualized the agile technology implementation approach, and the findings suggest that a more agile approach would help achieve organizational goals. Moreover, aligned with Järvinen and Taiminen (2016), who identified suitable content marketing and sales lead management processes as a vital part of the marketing automation initiative, Mero et al. (2022) add customer intelligence as a part of these key processes.

In the following chapters, a more specific definition of marketing automation will be composed to clarify the technology concept. The existing literature about marketing automation features and the factors contributing to its successful implementation will be reviewed. Furthermore, the effect of applying AI to marketing automation will be discussed.

2.1.1 Definition

Marketing automation is often defined as an information technology (IT) solution (Biegel, 2009; Järvinen & Taiminen, 2016) or as a cloud-based SaaS (Mero et al., 2022). Some authors define the core of marketing automation as the possibility of automating marketing processes (Biegel, 2009; Keens & Barker, 2009). In contrast, Mero et al. (2020) argue that the core is that marketing automation enables automated, personalized, and analytics-driven marketing activities to improve the effectiveness and efficacy of marketing operations.

The perspectives of definitions of marketing automation vary across the literature. Mero et al. (2020) divide these definitions into operational and strategic perspectives, which gives a clear picture of how the definitions of marketing automation differ. Therefore, this work will also employ the division into operational and strategic perspectives. The first perspective is the operational

perspective, and it views marketing automation as a tool applied to automate repetitive marketing tasks. Following this perspective, Biegel (2009) considers marketing automation to be an instrument used to automate marketing processes such as planning, budgeting, database management, lead management, campaign management, analytics, and reporting. Similarly, Heimbach et al. (2015) define marketing automation as a tool that is used to react to customers' actions and automatically personalize content. However, in the second perspective, marketing automation is not only seen as a tool but more as a resource to support the company's strategies. From the strategic perspective, marketing automation is perceived as a possibility to improve the effectiveness and efficacy of marketing operations, as well as a possibility to evolve organizational structures and processes (Järvinen & Taiminen, 2016; Mero et al., 2020; Mero et al., 2022). In addition, marketing automation offers strategic opportunities to build and maintain companies' customer relationships (Del Rowe, 2016; Järvinen & Taiminen, 2016).

For this thesis, the definition of marketing automation is considered from the strategic perspective, where marketing automation is not limited to its features as a tool. Instead, marketing automation offers technological possibilities to improve marketing operations, but it is also recognized as a strategic part of the company's marketing objectives (Del Rowe, 2016; Järvinen & Taiminen, 2016; Mero et al., 2020).

The strategic perspective allows an understanding of marketing automation's benefits to a company besides improving its operational efficiency. By collecting data from different touchpoints, marketing automation facilitates automated marketing processes that enable companies to track, target, engage, and manage customers along their customer journey (Heimbach et al., 2015; Järvinen & Taiminen, 2016). As a result, marketing automation enables companies to understand their audience better. In addition, the system offers possibilities to build stronger and deeper customer relationships when the companies reach their customers at the right time, in the right channel, and with the right type of content (Järvinen & Taiminen, 2016).

2.1.2 AI and marketing automation

Marketing automation helps automate marketing processes, but at the same time, it offers multiple other benefits for the adopting organization. The typical marketing automation features include, for example, the generation of customer insights along the customer journey, behavioral targeting, automated personalization of marketing communications through the channels, seamless sales lead management, and transparency in marketing productivity by tracking which customer touchpoints are related to the customers' purchase decision (Heimbach et al., 2015; Järvinen & Taiminen, 2016; Mero et al., 2020). Apart from technological features, sales lead management, content marketing, and customer intelligence are the key processes where the affordances of marketing automation

can be capitalized (Bagshaw, 2015; Mero et al., 2020). Also, improved lead follow-up processes can help companies align their marketing and sales departments (Järvinen & Taiminen, 2016; Redding, 2015). In addition to other benefits, marketing automation may improve companies' conversion rates, cross- and up-selling, and retention rates (Biegel, 2009; Heimbach et al., 2015) or even cut costs (Bagshaw, 2015) and drive additional revenue (Keens & Barker, 2009).

One of the key advantages of marketing automation lies in its ability to personalize or customize marketing mix activities (e.g., personalized content) (Heimbach et al., 2015). Marketing automation makes it possible to automatically personalize marketing communication, which helps businesses meet the needs of a single customer, even within a large target group (Heimbach et al., 2015; Järvinen & Taiminen, 2016). The system allows a company to provide content in a format and time the recipient wants to receive it (Bagshaw, 2015; Del Rowe, 2016; Keens & Barker, 2009; Wood, 2015). When the message is personal and relevant to the recipient, it is more likely to get attention and, therefore, is more effective (Del Rowe, 2016; Järvinen & Taiminen, 2016). Furthermore, marketing automation helps to change the businesses' focus from products and services to more client-centric (Järvinen & Taiminen, 2016).

Data is crucial for marketing automation because automated marketing actions are reactions to existing, incoming, or changing information about the customer or user (Heimbach et al., 2015; Keens & Barker, 2009). Customer data can include stored information, such as a customer's purchase history and previous interaction with the company, or it can include current information, such as behavior on the company's webpage and geographical location (Heimbach et al., 2015). Marketing automation allows to utilize data from multiple data sources, which makes it possible to identify individual customers and track their behavior (Järvinen & Taiminen, 2016). These insights make it possible to tailor future customer experiences based on the behavior of actual customers (Wood, 2015).

Marketing automation includes a chain of actions that are activated when a customer's information or behavior triggers a predefined set of rules, guiding a customized marketing message on the chosen channel for the recipient (Heimbach et al., 2015). In general, the variety of marketing automation is based on the implemented triggers as well as the customization of the marketing communication (i.e., object) and channels (i.e., medium) (Heimbach et al., 2015). The general framework by Heimbach et al. (2015) explains the different steps of marketing automation (FIGURE 1). To clarify the concept, an example of marketing automation actions could be when a website visitor adds a product to the shopping basket but does not complete the purchase (trigger). The company can identify the website visitor because she has subscribed to a newsletter. Therefore, the marketing automation system will send her a personalized message that reminds her of an unfinished purchase (customized object) in an email (medium).
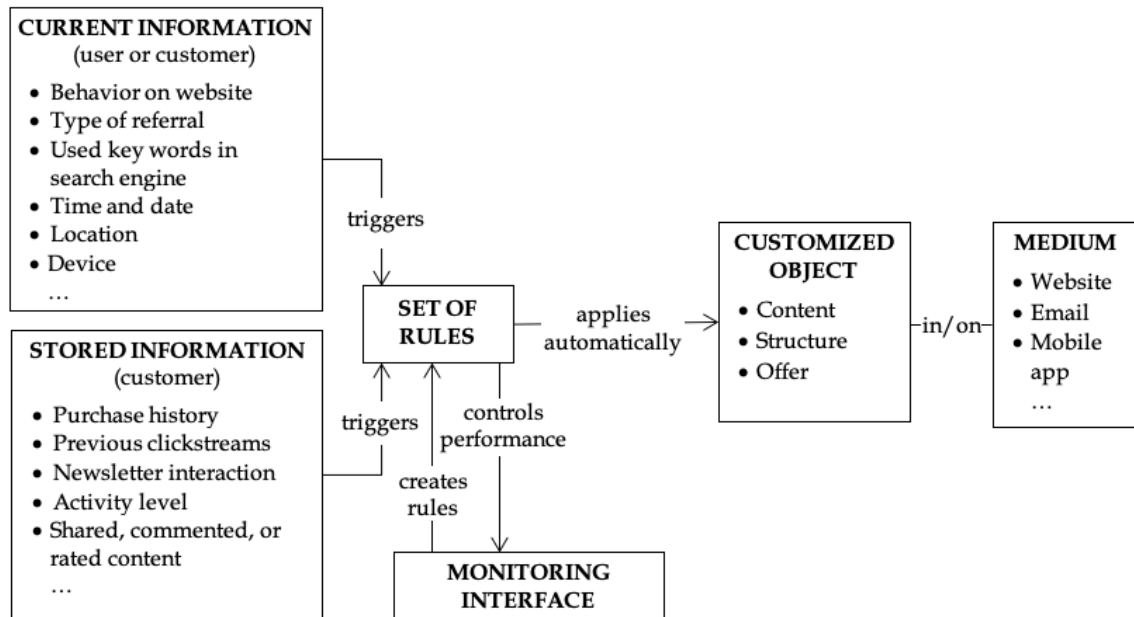
FIGURE 1   General framework of marketing automation (adapted from Heimbach et al., 2015, p. 131)

A company may have many customers, users, website visitors, and triggers; therefore, manually implementing the marketing actions would be time-consuming and challenging to manage (Wood, 2015). Determining the rules that guide the content delivery for the customers will be beneficial because the marketing automation system makes it possible to execute the actions for multiple events automatically (Bagshaw, 2015; Heimbach et al., 2015; Wood, 2015). These rules should be based on the analysis and insights from historical customer data, customer demographics, or real-time behavior (Heimbach et al., 2015). Marketers have traditionally created and optimized the rules for marketing automation, which has meant that marketing automation systems are only as intelligent as their users (Järvinen & Taiminen, 2016). Luckily, the increasing availability of AI provides more efficient tools to analyze customer data and optimize the rules for marketing automation (Del Rowe, 2016).

The use of AI-based technologies is growing, and in marketing, they are implemented, most importantly for customer interaction, to improve the quality of products and services (Anayat & Rasool, 2022). AI relies on different technologies, such as machine learning, natural language programming, rule-based expert systems, deep learning, and robotic process automation (Davenport et al., 2020; Kumar et al., 2021), enabling it to perform tasks in human-like ways (Huang & Rust, 2020; Kumar et al., 2021; Ma & Sun, 2020). AI can be used to automate business processes, where its algorithms carry out well-defined tasks (e.g., transferring data from customer contacts to the CRM system) or gain insights from customer and transaction data (Davenport et al., 2020). In addition, AI can self-learn and improve itself without following strict human instructions

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(Kumar et al., 2021; Ma & Sun, 2020). AI can also interact with and control other systems and machines (Kumar et al., 2021). In their study, Kumar et al. (2021, p. 868) define AI as follows:

> AI operates in the domain of continuous learning and automation, acting as the intelligence that drives data-based analytics and enables automated decision-making.

Augmenting marketing technologies with AI tools is considered a strategic decision that creates business benefits (Chatterjee et al., 2021; Wu & Monfort, 2022). AI offers multiple opportunities and benefits for marketing, such as streamlining processes, personalizing marketing mix elements, and making more effective decisions based on data (Davenport et al., 2020; Kumar et al., 2021). A survey by Statista (2022) shows that 32% of marketers utilize AI with their marketing automation systems. According to the survey, AI is mainly used with marketing automation for paid advertising, personalized email messages, and offers. However, integrating AI with marketing automation may be beneficial and increase a company's overall operational excellence and efficiency (Volkmar, Fischer & Reinecke, 2022). Including AI in marketing strategy can also positively impact a company's performance by increasing profits, quality of service and products, sales growth, and customer satisfaction (Wu & Monfort, 2022). Similarly, marketing automation is seen as a strategic decision to create a business advantage (e.g., Mero et al., 2020; Mero et al., 2022). Therefore, integrating AI and marketing automation can support an organization's marketing strategy and enhance the benefits of both technologies.

One of the key advantages of AI is its capability to collect, track, and monitor data. Therefore, the constantly growing mass of data is increasing companies' adoption of AI applications to enhance their marketing (Anayat & Rasool, 2022). Along with numerical data, many AI tools can analyze text, voice, image, and facial expression data (Davenport et al., 2020; Kumar et al., 2021). Also, AI can collect data from multiple sources and acquire real-time insights from high volumes of unstructured data (Davenport et al., 2020; Kumar et al., 2021; Ma & Sun, 2020). AI can assist marketing decisions by identifying customers' behavioral patterns and helping marketers understand the needs and wishes of existing and potential customers (Davenport et al., 2020; Huang & Rust, 2020; Kumar et al., 2021; Ma & Sun, 2020). However, according to Davenport et al. (2020), the impact of AI on marketing is highest in industries that involve frequent contact with many customers, such as packaged goods, retail, banking, and traveling. These sectors utilize enormous amounts of customer data that AI can analyze and process.

Another fundamental advantage of AI for marketing is its prediction capabilities. AI can provide analyses containing insights such as market trends and their changes (Huang & Rust, 2020) or customers' behavior, preferences, and product usage (Anayat & Rasool, 2022; Ma & Sun, 2020). These insights can be used, for example, to optimize prices or to identify different customer types and their needs, facilitating the company to provide more relevant marketing

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communication (Davenport et al., 2020; Huang & Rust, 2020). Thus, AI allows companies to understand and react better to their customers' individual preferences and enhance personal relationships with them (Kumar et al., 2021).

AI's data processing and analyzing capabilities can help marketing automation provide more personalized marketing by enhancing segmentation and targeting. Marketing automation makes it possible to identify individual customers and target them with personalized content (Järvinen & Taiminen, 2016), but AI helps marketers take personalization even further (Yaghtin & Mero, 2024). AI makes segmentation more fine-grained because it can find more variables than a human could ever find (Huang & Rust, 2020; Ma & Sun, 2020). Segmentation means sharing a market into pieces based on customers' unique needs and wants (Huang & Rust, 2020). Instead of a few large segments, AI can create many microsegments that can even mean a segment of one, including only one individual customer (Huang & Rust, 2020; Ma & Sun, 2020). AI and its predictive modeling can also recommend the optimal segments the company should target and those that should not (Huang & Rust, 2020). Furthermore, Huang and Rust (2020) define targeting as choosing the right segments the company will focus on with its marketing actions. The authors explain that traditionally, targeting has been mostly based on marketers' judgment, resources, the company's competitive advantage, and the segment's value for the company. While AI allows prediction at the individual level, which has not been possible for marketers with large numbers of customers. In other words, AI can enhance marketing by allowing automated segmentation and targeting of customers with more personalized content (Huang & Rust, 2020; Ma & Sun, 2020; Yaghtin & Mero, 2024). Consequently, integrating AI and marketing automation may release marketers' time from segmenting and guessing what the customers want, making it possible to outsource the time-consuming creation of marketing automation rules to AI (Del Rowe, 2016).

AI's ability to analyze and learn from data is valuable for managing leads and customer journeys. Relevant and personalized marketing communication at the right stage and context of customers' purchase journey can increase customers' engagement with the company (Järvinen & Taiminen, 2016; Redding, 2015). Kumar et al. (2021) highlight that today's customers expect effortless, intuitive, and seamless customer experiences across the touchpoints. However, companies' customer bases are often hard to manage, and they include a wide range of customers in different stages of their customer journeys. Järvinen and Taiminen (2016) divide the customer base into suspects, prospects, marketing leads, sales leads, opportunities, and deals, all with different levels of commitment towards the company. The authors explain that customers' purchase journey is not always linear; it may take time, and the customer can move back and forth on their journey. Instead of pushing customers through a predefined funnel, having a holistic view of the customer's journey helps a company to understand its customers better and meet their needs (Ma & Sun, 2020). With the help of AI, companies can validate that they are capturing the audience they are aiming for (Kumar et al., 2021). Along with an improved lead

management process, AI can improve customer satisfaction with better recommendations (Kumar et al., 2021). The continuous learning of AI also makes it possible to optimize the right content for the right situation, even when the customers' behavior changes (Kumar et al., 2021; Ma & Sun, 2020).

Among other benefits brought by AI, it can enhance the variety of a company's marketing automation actions by increasing the personalization of content and channels (Yaghtin & Mero, 2024). AI can track customers' real-time responses to marketing communication and adjust the content and channel based on these reactions (Huang & Rust, 2020). Yaghtin and Mero (2024) suggest that companies should combine human insights with AI tools to offer more advanced personalization. However, Järvinen and Taiminen (2016) note that marketing automation allows collecting more information about the customers and targeting them with more specific content, leading to an expanded need for content creation. Similarly, AI's personalization capabilities even more emphasize the need for content.

Regarding marketing content creation, generative AI technology has developed significantly in recent years (Dwivedi et al., 2023). Generative AI systems, such as ChatGPT, can generate text, image, and program code content, for example (Dwivedi et al., 2023). ChatGPT is a trained AI model designed to interact in a conversational way (OpenAI, 2022). In their paper, Dwivedi et al. (2023) list eight marketing strategies where generative AI can be used, including marketing campaign building, content marketing, content designing, chatbot-based services, customer experience, keyword suggestions, marketing research, and brand comparison. The authors forecast that generative AI will develop further, and companies could enrich their customer engagement and experience. At the same time, generative AI may reduce the involvement of humans compared to the previous marketing environment, which may challenge the current marketers' roles and marketing principles (Dwivedi et al., 2023).

As shown in this chapter, AI can enhance marketing automation in many ways, but at the same time, it modifies the different features of marketing automation. In their study, Huang and Rust (2020) found that AI can be utilized in three stages of strategic marketing planning: marketing research, marketing strategy, and marketing actions to execute the strategy. In the first stage, marketing research, the authors emphasize that AI can be used for data collection, market analysis, and customer understanding. In the second stage, marketing strategy, AI can be used in segmentation, targeting, and positioning (Huang & Rust, 2020). Lastly, in the marketing action stage, AI helps in standardization, personalization, and realization (Huang & Rust, 2020). Similar stages (e.g., data collection, segmentation, targeting, and personalization) are found in marketing automation and also identified in the general framework of marketing automation by Heimbach et al. (2015). Thus, it indicates that AI can be utilized to enhance the different marketing automation features. Based on the findings of AI tools' strategic use in marketing by Huang and Rust (2020) and the different marketing automation steps specified by Heimbach et al. (2015), FIGURE 2 was composed to explain AI-powered marketing automation. It visualizes the steps

of AI-powered marketing automation and how AI can be utilized in different stages. In addition, the dotted lines visualize the possible stages where generative AI can be used.
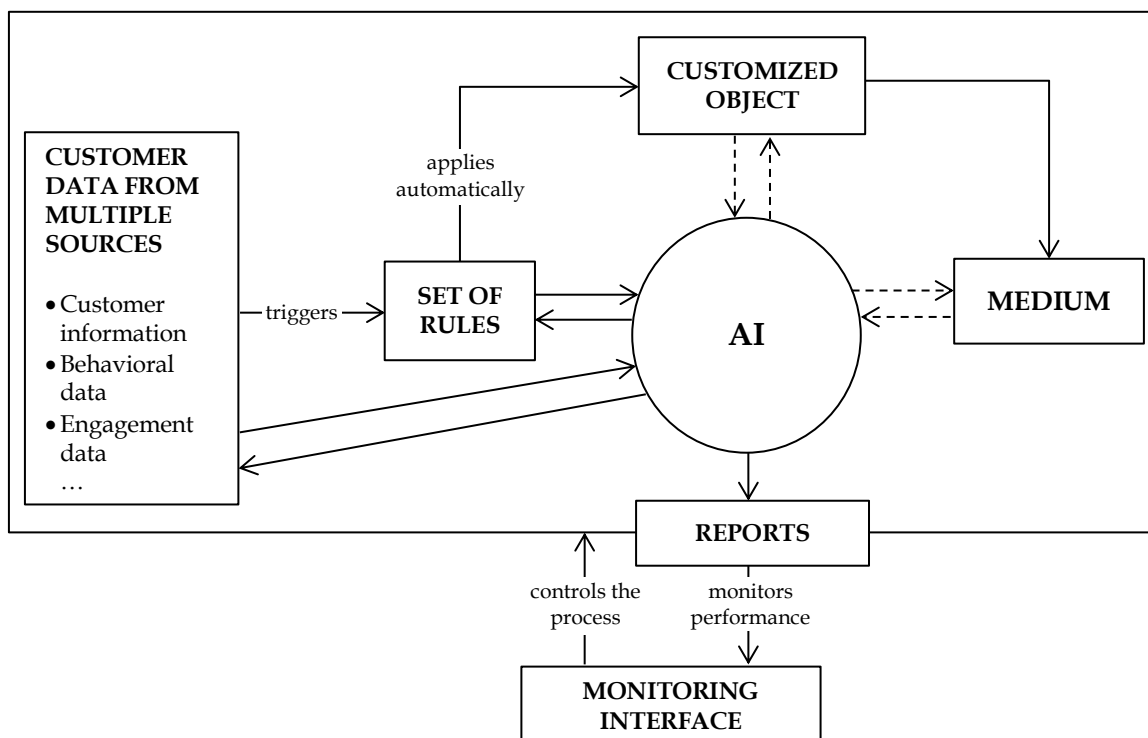
FIGURE 2   AI-powered marketing automation (composed from Heimbach et al., 2015; Huang and Rust, 2020)

AI-powered marketing automation can bring advantages to marketers, but at the same time, it can raise some concerns. Letting the technology decide and take control may be challenging, and it might be unclear to marketers how AI comes up with certain recommendations (Huang & Rust, 2020). To add transparency, Gaczek et al. (2023) suggest that if AI includes explanations of its predictions and recommendations, it may help users better accept AI. However, although AI may reduce some of the tasks previously conducted by marketers, it still requires humans to control and guide it (Huang & Rust, 2020). Moreover, Yaghtin and Mero (2024) emphasize that human experts often have experience and insights into an actual context, which can augment AI. Therefore, it is suggested that an organization should use AI to augment human capabilities instead of pursuing complete automation (Anayat & Rasool, 2022; Davenport et al., 2020; Yaghtin & Mero, 2024).

The increasing use of AI raises concerns regarding data privacy, algorithmic biases, and ethics (Davenport et al., 2020; Kumar et al., 2021; Volkmar et al., 2022). The amount of data is constantly increasing; therefore, the collection, utilization,

storage, and disposal of customer data is crucial (Kumar et al., 2021). Also, the outcomes of AI are based on data, and for this reason, it is crucial to ensure the data quality. If the data input is incorrect or biased, the AI results are likely biased, too (Huang & Rust, 2020). Thus, marketers should be aware of potential biases and pay attention to objective training data and rational evaluation of AI decisions (Huang & Rust, 2020; Volkmar et al., 2022).

In summary, applying AI can enhance marketing automation's features, such as more efficient data processing, predictive analytics, automated segmentation and targeting, and optimized marketing content and channels. Although marketing automation has multiple benefits, Mero et al. (2020) emphasize that the strategic transformation of the organizational structures, processes, and customer-centric culture is notably connected to the successful use of marketing automation. Similarly, Wu and Monfort (2022) emphasize that companies should integrate their internal resources, such as marketing capabilities, customer value co-creation, and market orientation, with AI-based marketing strategies to improve performance. Hence, the company must consider different organizational factors to gain the full benefits of AI-powered marketing automation. The typical organizational factors affecting marketing automation implementation are discussed in the following section.

2.2   Implementation

New technologies are considered to create benefits for the adopting company, such as lower costs, increased performance, and competitive advantages (Chatterjee et al., 2021; Kumar et al., 2021), but at the same time, the implementation is noticed to be challenging for many organizations. The question of how companies implement and take advantage of different technologies has interested many researchers, but only a few studies in the marketing automation context exist (Mero et al., 2020; Mero et al., 2022; Murphy, 2018).

Due to the limited availability of marketing automation literature, the understanding of marketing automation implementation is complemented by the studies of customer relationship management (CRM) and sales force automation (SFA) technologies (e.g., Bush et al., 2005; Honeycutt et al., 2005; King & Burgess, 2008; Nguyen et al., 2007). Marketing automation is often associated with CRM systems, and many vendors provide solutions where the technologies are integrated. For this reason, the concepts of the technologies might be blurred (Heimbach et al., 2015; Redding, 2015). CRM systems can be described as a database that allows a business to identify, acquire, and retain customer data, which provides a view of a single customer and helps to track customers' interaction with the organization (Nguyen et al., 2007; Redding, 2015). In contrast, marketing automation has its roots in email systems, making it possible to carry out segmented campaigns based on customer behavior (Redding, 2015).

However, nowadays, marketing automation has expanded beyond email marketing by providing personalized experiences for customers (Del Rowe, 2016). Consequently, marketing automation and CRM systems are both about tracking customers' interactions and learning about customers' needs and preferences to build long-term customer relationships that bring value to the customer and the company (Järvinen & Taiminen, 2016; King & Burgess, 2008; Nguyen et al., 2007). Both technologies are technically complex large-scale technologies that store, process, and utilize customer data (Biegel, 2009; King & Burgess, 2008). Similarly, SFA is a complex marketing technology; therefore, its implementation process resembles marketing automation. SFA is often part of CRM systems, although it is a detached technology that streamlines the sales management process (Sanfilippo, 2023). SFA can be used for diverse tasks such as contact management, scheduling, creating sales plans, forecasting, prospecting, and searching product information (Honeycutt et al., 2005).

To better understand the concept of implementation, the definition of implementation by Damanpour (1991) has been followed in this study. The author considers innovation adoption to consist of two stages: initiation and implementation. The initiation stage includes all the actions leading to adopting of the technology (Damanpour, 1991). Meanwhile, the implementation stage consists of all events and actions related to the modifications in the technology and organization, the initial utilization of the technology, and its continued use when the technology becomes a routine feature of the organization (Damanpour, 1991).

Implementation is a complicated process, and many companies fail to implement a new technology successfully (Honeycutt et al., 2005; King & Burgess, 2008). In their study, Honeycutt et al. (2005) identified that problems in the organization's planning, communication, and evaluation stages impede successful implementation. Additionally, their findings indicate that the employees' or users' perceived benefits and costs of the new system affect the result of the whole implementation. Honeycutt et al. (2005) created a framework to detail the organizational impediments to the successful implementation of SFA and the impact of the technology on the sales force and their potential outcomes (FIGURE 3). Their framework can also be utilized to implement other similar technologies, and it is used as the main framework of this research to understand which factors are affecting the successful implementation of an AI-powered marketing automation system. The following chapters concern the enablers and impediments of marketing automation implementation, categorized into planning, communication, and evaluation according to the three stages of the framework.
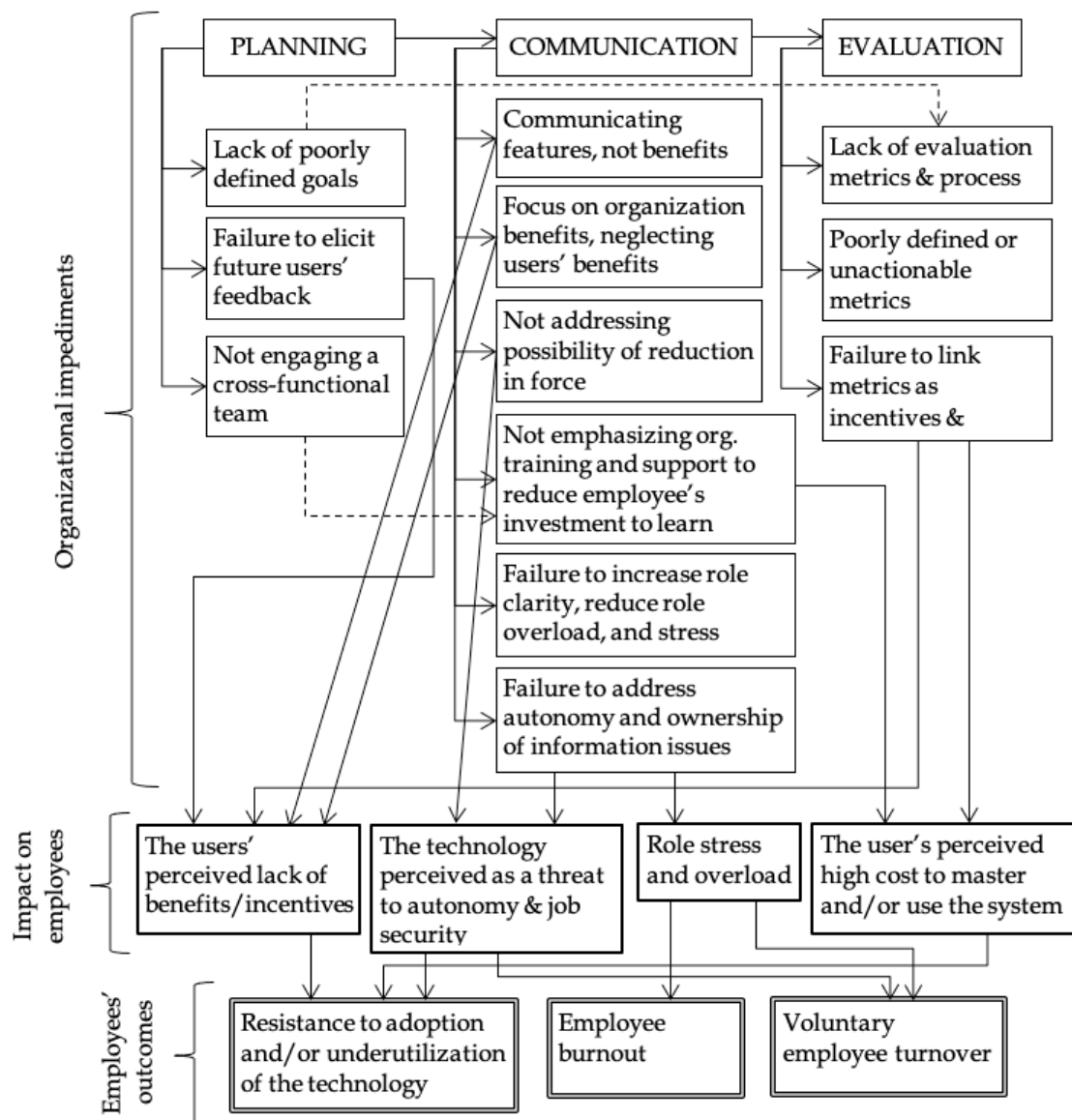
FIGURE 3   Impediments to the adoption and implementation of an automation technology (adapted from Honeycutt et al., 2005, p. 315)

2.2.1   The planning phase

The growing number of different marketing technologies is challenging businesses to identify which technologies they should implement. Some new technologies may sound trendy and promise high results, but instead, a company should consider which technologies it needs to fulfill its strategic goals or resolve its business problems (Honeycutt et al., 2005; Nguyen et al., 2007). Similarly, a company should specify the goals and benefits it seeks with the new technology

(Honeycutt et al., 2005). The strategic goals of marketing automation could be, for example, enhanced productivity by automated processes releasing marketers' time or increased customer satisfaction and sales. A lack of strategic planning may cause the focus to be only on the technological capabilities instead of the necessary strategic changes (Foss, Stone & Ekinci, 2008; Wright, Fletcher, Donaldson & Lee, 2008). However, the benefits of marketing automation largely rely on the strategic changes in the organizational structures, processes, and customer-centric culture (Järvinen & Taiminen, 2016; Mero et al., 2020; Mero et al., 2022). At the same time, the benefits are partly related to market response, which is hard to foresee or control and challenges planning (Mero et al., 2020).

The views of the implementation plan and its execution differ across the literature. Traditionally, the literature has suggested adopting and implementing new technology as a well-planned and linear process (Mero et al., 2020). This type of technology adoption model is called the waterfall model, where planning is at the center, and the implementation progresses systematically through the pre-planned steps (Lahtinen et al., 2022). In the waterfall approach, the technology adoption starts by carefully considering different technology options and is followed by a detailed implementation plan (Lahtinen et al., 2022). Planning and starting the implementation takes much time, and by the time the technology is finally implemented, better solutions might already be available. By contrast, some authors argue that the implementation of marketing automation is a dynamic and flexible process, and therefore, a company should rely on an implementation approach that embraces and enables changes (e.g., Keens & Barker, 2009; Mero et al., 2020; Mero et al., 2022). Making fast adoption decisions and learning about the new technology through pilot use cases may benefit the company (Mero et al., 2020; Mero et al., 2022).

Today's complex and fast-changing business environment makes companies rely on more agile and learning-by-doing approaches in their technology implementation processes (Keens & Barker, 2009; Mero et al., 2020; Mero et al., 2022). The core idea in agile implementation is to continually learn by trial and error to find which variations of the technology and organizational routines bring optimal results (Mero et al., 2022). Mero et al. (2022) define agile implementation as a process where a company matches its organizational routines with the features of the implemented technology. The authors clarify that the process requires a series of overlapping decisions on how a company can adapt organizational routines to fit the technology features and how to adapt the technology features to fit the company's existing routines. These decisions are made based on the organizational goals, perceived affordances, and constraints of the technological and organizational context (Mero et al., 2022).

The increasing popularity of SaaS technologies is supporting agile implementation. In their study, Alshawi, Missi and Irani (2011) found that businesses prefer uncomplicated systems that are easy to use, helping to reduce the implementation periods and training costs. Fortunately, compared to traditional technologies, SaaS is fast and easy to set up and does not often require a significant capital investment in order to start gaining the potential benefits

(Keens & Barker, 2009; Mero et al., 2022). With SaaS, the features of the technology can be explored, and their relevance to the organization's goals and routines can be assessed before including a lot of resources in the planning (Mero et al., 2022). Thus, creating detailed plans may be more costly than experimentally testing if the technology matches the organizational needs (Mero et al., 2020; Mero et al., 2022).

Although agile implementation approaches are often considered to be used in small companies, Mero et al. (2020) found that even large-sized established companies rely on flexible approaches. However, their study showed that the choice of implementation approach is not unambiguous, and the companies move back and forth between causal and effectual reasoning while adopting marketing automation. More accurately, Mero et al. (2020) explain that the recommended dominant of reasoning varies in different phases of the adoption process. They noticed that effectual reasoning is preferable in the early phases of the adoption when the company explores marketing automation opportunities and specifies the required organizational changes. Instead, when the company has gained learning from pilot use cases, the authors suggest that it should move on to more causal reasoning to involve more comprehensive and strategic implementation. Finally, when the workflows and processes are in place, the company should find a balanced approach of effectual and causal reasoning, using the existing structures and processes but innovating and experimenting with new use cases (Mero et al., 2020).

Marketing automation implementation includes different roles and departments throughout the organization. The IT department often leads the new technology efforts and later puts them into practice throughout the organization (Raman, Wittmann & Rauseo, 2006). However, employees and teams appreciate different technological features, and the specific goals for marketing automation vary across the organization. Thus, cross-functional teams should be involved throughout the implementation process to identify different business and technical requirements (Honeycutt et al., 2005; King & Burgess, 2008; Raman et al., 2006). Similarly, the end users of the new technology should be committed and involved in the decision-making already in the initial stage (Honeycutt et al., 2005; Raman et al., 2006; Redding, 2015). End users' experience may help to recognize the critical features they need to use the new system. Consequently, involving the end users in the planning and implementation stages helps to increase their acceptance and commitment to the new technology, which is crucial for successful implementation (Gohmann, Guan, Barker & Faulds, 2005; Honeycutt et al., 2005).

Furthermore, successful marketing automation implementation requires alignment with marketing and sales processes (Järvinen & Taiminen, 2016; Mero et al., 2020). Järvinen and Taiminen (2016) state that the silos between marketing and sales should be avoided in order to create business benefits. The authors explain that marketing and sales alignment includes integration with technology systems, such as CRM and marketing automation software, and close collaboration between the departments in planning and operations. Similarly,

seamless customer experience requires close collaboration between all other functions involved in the customer interfaces, such as customer support, web services, and IT (Mero et al., 2020; Wood, 2015). In addition to the internal stakeholders, the implementation process often includes external partners, for example, vendors. Selecting partners with whom collaboration and communication work supports the success of the technology (Alshawi et al., 2011; Keens & Barker, 2009). The communication and support regarding marketing automation implementation should not end when the system is purchased.

2.2.2   The communication phase

Successful technology implementation requires two-way interdepartmental communication and cooperation throughout the process (Honeycutt et al., 2005; King & Burgess, 2008). Bush et al. (2005) found that the outcomes of the implemented technology depend firstly on the employees' acceptance of the process change and secondly, on the technology as an enabler of the process. Similarly, Wood (2015) emphasizes that it is essential to ensure that the different stakeholders understand that marketing automation requires a shift of thinking along with technological change. A lack of understanding may lead to employees' resistance to the technology and, therefore, to implementation failure (Becker, Greve & Albers, 2009; Bush et al., 2005; Honeycutt et al., 2005; Zablah, Bellenger & Johnston, 2004). Change resistance requires change management and leadership (Bohling, Bowman, LaValle, Mittal, Narayandas, Ramani & Varadarajan, 2006; Mero et al., 2020). Understanding and supporting the change may be easier for the employees if the steps of the implementation process, the benefits of the new technology, and the efforts needed from different stakeholders are clearly communicated (Bush et al., 2005; Honeycutt et al., 2005).

Employees' acceptance and continuous use of the new technology support its implementation. How employees perceive the benefits and costs of the new technology may affect their commitment to use the system (Alshawi et al., 2011; Honeycutt et al., 2005). If the employees feel that they will be replaced by technology or that it is used to monitor them, it may impede implementation (Gohmann et al., 2005; Honeycutt et al., 2005). Therefore, transparency and communication of why the technology is implemented may reduce employees' resistance (Gohmann et al., 2005; Honeycutt et al., 2005). It may be easier for the company to consider the tangible benefits of the technology, but the implemented technology should be seen as an enabler of the organizational process change (Zablah et al., 2004). To help the employees see the new system's benefits, the company should not only communicate about its technological features but also clarify how the employees using the system will benefit from it (Honeycutt et al., 2005). Honeycutt et al. (2005) emphasize that employees may feel that the new technology increases their workload instead of increasing efficiency, which may limit its use. Similarly, users' resistance to algorithms and AI may limit the use of AI-based technology (Gaczek et al., 2023). In their study

concerning AI-powered CRM, Gaczek et al. (2023) found that appropriate explanations help users understand AI's decisions, reducing resistance. The authors explain that accepting AI as a decision-making team member requires collaboration between the users and AI. Two-sided information sharing between humans and AI enhances mutual learning and AI's participation in decision-making (Gaczek et al., 2023).

Marketing automation implementation requires employees with suitable competence. Staff and management technological skills notably affect the implementation (Alshawi et al., 2011). Marketing automation requires, for example, developers, content creators, analysts, marketing automation specialists, or employees with some of these skills to implement and run the system. Murphy (2018) explains that a lack of human resources and suitable skills may hinder marketing automation implementation and its use. Thus, a company should constantly provide training but also work on keeping good and skilled employees (Redding, 2015). Järvinen and Taiminen (2016) state that the rapid development of technologies requires employees who understand the characteristics of the digital age, different technologies, and analytics tools. However, this expertise is not always found in the company. Hence, it may be sometimes reasonable to outsource all or some parts of the marketing automation implementation and maintenance (Murphy, 2018).

Marketing automation may introduce new tasks and change the responsibilities or roles of the employees. If the change of role or tasks in the automated organization is unclear, it may harm the employees' commitment to the technology (Honeycutt et al., 2005). Marketing automation users may have different roles, backgrounds, and technical competence. Therefore, ensuring that employees have sufficient competence to use the system is essential. Providing sufficient training, time, and equipment is crucial for supporting the users to accept and learn the new system (e.g., Buttle, Ang & Iriana, 2006; Honeycutt et al., 2005; Murphy, 2018; Raman et al., 2006). People have unique learning curves, so the company should provide specialized training when needed (Zablah et al., 2004).

The managers' commitment and support are other crucial factors affecting marketing automation implementation. Gohmann et al. (2005) found that managers' and end users' differences in perceptions of the new technology may hinder the implementation. For this reason, managers should understand the new technology sufficiently and provide continuous support to remove the barriers the end users may have with the new technology (Buehrer, Senecal & Bolman Pullins, 2005; Gohmann et al., 2005). A lack of process management and executive management commitment may lead to the failure of the implementation (Barker, Gohmann, Guan & Faulds, 2009; King & Burgess, 2008; Nguyen et al., 2007). By considering goals and allocating necessary resources, the management drives the implementation and may positively impact employees' acceptance and engagement with the new technology (Alshawi et al., 2011; Barker et al., 2009; Chatterjee et al., 2021; Raman et al., 2006).

The organization's willingness to change processes and culture toward more customer-oriented supports successful implementation (Alshawi et al., 2011; Järvinen & Taiminen, 2016; King & Burgess, 2008). However, Järvinen and Taiminen (2016) noticed that changing the focus from promotional and product-oriented marketing to customer-centric marketing requires support and time. The authors clarify that if the change is not supported, it may lead to a situation where the new technology is used the same way as the previous one.

Organizations' technological readiness and how the new system can be integrated into the technological infrastructure are also essential for successful implementation (Alshawi et al., 2011; King & Burgess, 2008; Peltier, Zahay & Lehmann, 2013). Mero et al. (2020) suggest that the new technology should be integrated with the existing technologies so that the data moves between the technologies, allowing a holistic picture of the customers. Therefore, cooperation and communication between marketing and IT departments support the implementation (Peltier et al., 2013). In addition, how data is managed affects the implementation of new technology (Alshawi et al., 2011; Keens & Barker, 2009; Peltier et al., 2013). The quality of data directly influences customer and business performance (Keens & Barker, 2009; Peltier et al., 2013). Thus, high quality, up-to-date, accurate data, and willingness to share data are crucial for marketing technologies (Alshawi et al., 2011; King & Burgess, 2008; Peltier et al., 2013). Fortunately, AI can help companies manage data, for example, by collecting unstructured and structured data from multiple sources or cleaning the data (Kumar et al., 2021).

Altogether, multiple organizational factors enable and impede marketing automation implementation. Previous studies show that implementing marketing technology impacts the whole organization and its processes. Therefore, TABLE 1 composes the key findings of studies about marketing automation, CRM, and SFA implementations discussed in this chapter.

TABLE 1   Factors affecting the adoption and implementation of large-scale marketing technologies

Literature of marketing automation implementation	
Article	**Key findings**
Agile logic for SaaS implementation: Capitalizing on marketing automation software in a start-up (Mero et al., 2022)	Agile implementation of marketing automation SaaS includes iterative adaptations to the technology features and organizational routines via learning by doing rather than realizing a predesigned implementation plan.
Effectual and causal reasoning in the adoption of marketing automation (Mero et al., 2020)	Even large B2B companies use both causal and effectual reasoning when adopting marketing automation. Furthermore, the five key domains of marketing automation are customer knowledge, information systems infrastructure, analytics, interdepartmental dynamics, and change management.

Silver bullet or millstone? A review of success factors for implementation of marketing automation (Murphy, 2018)	The seven common factors that businesses should consider and follow pre-, during, and post-marketing automation implementation are the availability of the correct human resources and expertise, reviewing and implementing new business processes, correctly scoping the implementation project, gaining organizational buy-in, creating customer-centric content, continuing investment, and setting realistic expectations.

Literature of CRM implementation

Article	Key findings
CRM implementation: effectiveness issues and insights (Bohling et al., 2006)	The link between CRM and the company's overall marketing strategy affects the success of CRM implementation. Lack of necessary resources, insufficient focus on change management, and insufficient involvement of employees hinder successful CRM implementation.
Customer Relationship Management Implementation Gaps (Zablah et al., 2004)	For a successful CRM process, it is critical to align the constituent elements: people, processes, and technology. Failure to align the elements leads to innovation gaps that hinder technology adoption.
Leveraging CRM for Sales: The Role of Organizational Capabilities in Successful CRM Implementation (Raman et al., 2006)	Organizational learning, customer-centric orientation, business process orientation, and task-technology fit are four categories of organizational capabilities that influence CRM implementation. Lack of flexibility in the software and lack of end users' skills impede successful CRM implementation.
Organizational Learning and CRM Success: A Model for Linking Organizational Practices, Customer Data Quality, and Performance (Peltier et al., 2013)	CRM system implementation requires high-quality customer data.
Organisational, technical and data quality factors in CRM adoption — SMEs perspective (Alshawi et al., 2011)	Most of the factors influencing the adoption of CRM are similar in SMEs and other types of organizations. These organizational, technical, and data quality-related factors included, e.g., staff and managerial ICT skills, organization size, internal support, vendor's support, business strategy and objectives, ICT infrastructure, implementation benefits and cost, system evaluation and selection criteria, and customer data quality and infrastructure.
Strategies for successful CRM Implementation (Nguyen et al., 2007)	The reasons affecting the failure of CRM implementation are, e.g., lack of knowledge and research, lack of process management, and lack of executive management commitment.
The effect of AI-based CRM on organization performance and competitive advantage: An empirical analysis in the B2B context (Chatterjee et al., 2021)	Implementing AI-based CRM in B2B relationship management can improve organizational performance. Management needs to support the system's usage and ensure proper training.

The impact of technological and organizational implementation of CRM on customer acquisition, maintenance, and retention (Becker et al., 2009)	Active support by the management and employees is a vital factor for successful CRM implementation.
Understanding success and failure in customer relationship management (King & Burgess, 2008)	Nine critical success factors for CRM include top management support, communication of CRM strategy, knowledge management capabilities, willingness to share data, willingness to change processes, technological readiness, culture change/customer orientation, process change capability, and systems integration capability.
What makes for CRM system success — or failure? (Foss et al., 2008)	The critical reasons for CRM failures are poor planning, lack of clear objectives, and not recognizing the necessity for business change.

Literature of SFA implementation	
Article	**Key findings**
Impediments to sales force automation (Honeycutt et al., 2005)	Organizational impediments to SFA implementation occur in the following three stages: planning, communication, and evaluation.
Perceptions of sales force automation: Differences between sales force and management (Gohmann et al., 2005)	Differences between management and salespeople in the perceptions of the SFA system can affect its successful implementation. Differences were found, e.g., in the perception of productivity and the level of monitoring.
Sales force automation: review, critique, research agenda (Buttle et al., 2006)	Critical success factors of SFA implementation are classified as organizational/cultural, project-related, interpersonal, intrapersonal, and technical.
Sales force automation systems: An analysis of factors underpinning the sophistication of deployed systems in the UK financial services industry (Wright et al., 2008)	Managerial imperatives in the adoption of SFA may lead to employees' resistance.
Sales force technology usage— reasons, barriers, and support: An exploratory investigation (Buehrer et al., 2005)	Lack of management and technical support are the main barriers to SFA usage, whereas training increases technology usage.
Understanding sales force automation outcomes: A managerial perspective (Bush et al., 2005)	The outcomes of SFA depend on employees' reactions to how the process is agreed upon and whether the technology is perceived as an enabler of the process.
Why is my sales force automation system failing? (Barker et al., 2009)	There are four reasons for low user acceptance of the technology: (1) disruption of established sales routines, (2) perceived loss of control, (3) different expectations between management and salespeople, and (4) perceived management lacks full commitment to the system implementation.

2.2.3 The evaluation phase

Evaluating the success of marketing automation implementation is essential. The implemented technology should be linked to the company's business objectives and the overall marketing strategy, which should assist in setting the metrics and measuring the results (Bohling et al., 2006; Keens & Barker, 2009). The evaluation procedures and metrics should be selected in the early stages of the implementation based on the company's goals for the technology (Bohling et al., 2006; Honeycutt et al., 2005). If the goals for the technology are unclear, it can complicate the whole evaluation process (Honeycutt et al., 2005).

Creating an overall picture of the realization of the benefits and costs of the implementation is essential (Bohling et al., 2006). However, seeing the full benefits of marketing automation requires time and monetary investment (Järvinen & Taiminen, 2016). Capturing and analyzing suitable marketing performance measurement metrics helps assess how beneficial the new technology is (Bohling et al., 2006; Keens & Barker, 2009). More specifically, Bohling et al. (2006) suggest making a quantifiable business case that helps justify an investment and assists in tracking and monitoring progress. In addition, the authors state that a business case helps the company prioritize and balance its short-term and long-term goals.

Estimating a monetary return on a technology investment (ROI) is often challenging for companies because the total costs of the implementation are difficult to monitor, and costs are divided into several departments (Honeycutt et al., 2005). Thus, implementing metrics the marketing department can measure by itself may help (Keens & Barker, 2009). Including cross-functional teams in the evaluation phase is important (Honeycutt et al., 2005). Also, the perceptions of ROI may differ between the managers and the end users (Honeycutt et al., 2005). Setting, monitoring, and evaluating the metrics and communicating them to the end users support their attitude toward the technology and its usage (Honeycutt et al., 2005).

Altogether, analyzing and monitoring the results of the new technology should provide information to guide the company's strategic decisions (Raman et al., 2006). Harnessing analytics helps the company to make data-driven decisions and optimize its marketing performance (Mero et al., 2020). Similarly, Mero et al. (2022) state that as implementation proceeds, it is essential that the company continuously assess the software usage and processes to develop and strengthen the benefits of the marketing automation system. Furthermore, the authors emphasize that monitoring and reacting quickly to market changes or customer behavior is essential.

In summary, the literature review supports that marketing automation implementation is a complex process influenced by different technological, organizational, and human factors. A successful implementation requires a flexible approach, changes in organizational operations, and mindset changes. More perspective is gained through the interviews to further develop the understanding of AI-powered marketing automation implementation.

3 METHODOLOGY

The methodology is a general approach to studying a research problem (Metsämuuronen, 2011). It works as a base for the research and describes the principles, procedures, and rules that guide the whole research process (Eriksson & Kovalainen, 2008). This way, methodology helps answer the research question and achieve the research objectives.

This chapter describes the research methodology of this study. First, the qualitative research method is described, and the case study strategy used in this research is discussed. In addition, this chapter describes the data collection and analysis process in this research.

3.1 Qualitative research

This research is conducted as qualitative research. Qualitative research fits situations where the aim is to provide rich and detailed descriptions of the phenomenon or to gain a deeper understanding of causalities in their natural context (Metsämuuronen, 2011). Qualitative research allows the researcher to explore complex business-related issues in their own context, providing a deeper understanding of how things take action in real life (Eriksson & Kovalainen, 2008). In addition, qualitative business research can be utilized to gain a critical and reflective view of the core processes of the business (Eriksson & Kovalainen, 2008). In that case, qualitative research suits the phenomenon researched in this study. However, as Eriksson and Kovalainen (2008) state, due to the critical and reflexive nature of qualitative research, it is essential to acknowledge that the decisions made during the research process may greatly frame the outcome of this research.

The research can be deductive, inductive, or abductive (Eriksson & Kovalainen, 2008). Qualitative research often utilizes inductive logic, where the theory is more an outcome of the empirical evidence, whereas deductive logic

tests the established theory (Bryman & Bell, 2007). The third is abductive logic, which takes place between these two and combines inductive and abductive reasoning (Bryman & Bell, 2007). This research process uses abductive reasoning because it utilizes established theory in the analysis phase, but at the same time, the research seeks to find new observations from the empirical data.

3.1.1   Case study

The case study approach is employed as the research strategy of this study. A case study is a research method that examines a case or multiple cases to find answers to specific research questions (Eriksson & Kovalainen, 2008). In addition, the case study approach is especially suitable for research aiming to answer "how" or "why" questions (Yin, 2003). According to Eriksson and Kovalainen (2008), the research question should guide the selection of the research method. Thus, the case study method can help to seek answers to the primary research question of this study: *How can a business implement AI-powered marketing automation?".*

Another reason for selecting a case study is that the method is favored when the research investigates real-life events such as organizational processes (Eriksson & Kovalainen, 2008). A case can be an individual, a single case such as a group, institution, or community, or multiple cases as several different people or professions (Gillham, 2010). This study focuses on a single case, and the 'case' of this study refers to implementing an AI-powered marketing automation system in the context of a large-scale company.

A case study allows the researcher to focus deeply on a unique case (Gillham, 2010). The case investigated in this study is timely because the use of AI in marketing is increasing. At the same time, the topic is still rare as the utilization of AI-powered marketing automation has not been widely studied. The case study method is suitable for investigating organizational processes (Eriksson & Kovalainen, 2008). In that case, it allows the researcher to form a comprehensive picture of this new phenomenon and increase understanding of the issue. However, it is noteworthy that intensive case studies are not often used to produce knowledge that could be generalized directly to other contexts (Eriksson & Kovalainen, 2008).

As qualitative research methods in general, the case study approach is flexible and can be adapted to suit the needs of the study in question (Eriksson & Kovalainen, 2008). In the case study, the collected data and context should be understood before the theoretical notions are brought to the research. These help to choose the theories that best explain the context (Gillham, 2010). In addition, the case study approach allows for the refocusing of the case, collecting materials and their analysis, and revising research questions throughout the process (Eriksson & Kovalainen, 2008).

3.1.2 Case company

AI and marketing automation integrations are growing but have yet to be established for most companies. Only one-third of the companies utilize AI in some way with their marketing automation systems (Statista, 2022). Luckily, the case company selected for this study already gained knowledge of AI-powered marketing automation. The company's ongoing implementation of the technology allowed a fertile possibility for the researcher of this study to deepen the understanding of the factors that impact AI-powered marketing automation implementation.

The selected case company was a large Finnish company operating in the financial sector. The company offered a wide range of banking, investment, and insurance services for private and business customers through a diverse range of digital channels, but it also had a wide network of branches nationwide. The case company had a long history in traditional banking but aimed to be a diversified service company of the digital era. Therefore, the company was constantly developing its digital services and investing in technological development. However, the processes and operations differed among the company's different business segments, and thus, this work was limited only to the retail business segment.

The case company had been using a marketing automation system for several years but was switching to another one. Implementing a new marketing automation system was part of the case company's real-time interaction management (RTIM) project, which started in 2019. The project aimed to achieve more customer-oriented real-time marketing and customer communication. In addition to the new marketing automation system, the RTIM project included the development of channels, data, and reporting, which were executed together with different teams across the organization.

The case company was replacing its old marketing automation system with an AI-powered marketing automation system. The new system was provided by Pega, a technology company offering a low-code platform for AI-powered decision-making and workflow automation (Pega, 2023b). The company provided software solutions for different areas, such as intelligent automation, customer engagement, customer service, sales automation, and client onboarding. The marketing automation system implemented by the case company was called Pega Customer Decision Hub, which helped to predict customers' needs and personalize interactions in different channels (Pega, 2023a). Based on real-time customer data, analytics, and AI-powered decision-making, the system promised to make it possible to provide one-to-one marketing and communication by reaching customers across channels at the right time with customized content (Pega, 2023a).

3.2 Data collection

Qualitative case studies can utilize several data collection methods, such as interviews, observations, and document analysis (Gillham, 2010). In addition, the case study research can collect empirical data from one source or combine multiple sources as the data was collected in this research (Eriksson & Kovalainen, 2008).

The primary data of this research was obtained through semi-structured interviews. Interviews are one of qualitative research's most used data collection methods (Eriksson & Kovalainen, 2008). Especially in business research, in-depth interviews are often used as a primary data source (Eriksson & Kovalainen, 2008). According to Tuomi and Sarajärvi (2018), the advantage of using interviews as a data collection method is its flexibility. The interviewer can adapt the interview according to the situation, modify the order of the questions, repeat and clarify the questions, correct possible misunderstandings, and ask for further information (Tuomi & Sarajärvi, 2018). Semi-structured interviews do not follow a strict structure but allow engaging discussions past the questions (Patton, 2002). Therefore, the interview was a suitable data collection method for this study by enabling rich data and a deeper understanding of a rather broad and unstructured research context.

The interviewees of this research were employees of the case company. The purposeful sampling method was used in this research to select the interviewees. The purposeful sampling method allowed for interviewing the persons with the most valuable information about the topic of the study (Patton, 2002). Therefore, interviewed employees were chosen for the study based on their role and the likelihood of obtaining relevant knowledge of the research topic. The case company's AI-powered marketing automation implementation process included many employees in the case company who work in different roles and levels of participation. For this reason, the interviews were conducted with employees in varying roles to obtain different perspectives and achieve an overall view of marketing automation implementation.

This research conducted eight interviews with interviewees in various manager and expert roles (TABLE 2). Although all interviewees were involved in implementing the new marketing automation, their roles and levels of participation varied significantly. Interviews were conducted individually on Teams or face-to-face during March and April 2023. All eight interviews were conducted in Finnish. Appendix 1 presents the basis for the interview questions, but none of the interviews followed strictly formed questions. Instead, the interview questions were arranged by themes found in the theory. The themes of the interviews were: (1) stages of the marketing automation implementation process in the case company, (2) enablers and impediments of the implementation of AI-powered marketing automation, (3) benefits and challenges of AI-powered marketing automation, (4) successfulness of the new

marketing automation implementation process. The interviewees also provided additional information in their interviews.

TABLE 2   Details of the interviews

Interviewee	Role in the marketing automation implementation	Length
A	- Vital role in leading the technical development of the implementation - Has participated in the system acquisition and implementation process from the beginning	53 min
B	- Responsible for the processes and organizational readiness for the implementation - Has participated in the system acquisition and implementation process from the beginning	54 min
C	- Vital operational marketing role in the implementation - Has joined the implementation process after the system was acquired	43 min
D	- Responsible for strategies and policies in the implementation process - Has participated in the system acquisition and implementation process from the beginning	52 min
E	- Business area lead - A not active member of the implementation process but is part of the operative steering group	39 min
F	- Operates at the management level and participates in the decision-making - Minor role in the actual implementation process	34 min
G	- Responsible for architecture and has guided the direction of the implementation - Participated in the system acquisition and early stages of the implementation process but did not have an active role in the later implementation stages	65 min
H	- Operative user of marketing automation system - Has joined the implementation process after the system was acquired	45 min

In addition to the interviews, study data included observations of the case company's new marketing automation implementation process. Observation is a qualitative research technique that is used to collect empirical data by observing the research phenomenon in its natural context (Patton, 2002). Observation can be used as an own data collection method, but it is often used to complement the research data collected by the primary research method (Eriksson & Kovalainen, 2008). The observation was made to allow a more comprehensive understanding of the context of this study. The observation data were collected during nine months, from September 2022 to May 2023. Because the implementation process had been going on for some time in the case company before this study, the researcher familiarized herself with the causes and previous stages of the implementation. The familiarization included observations of the case company's

documentation about the implementation process and informal discussions with the case company's employees. Furthermore, the researcher familiarized herself with the AI-powered marketing automation software (Pega) implemented by the case company. In addition, the researcher requested further information on AI-powered marketing automation from Pega, which the software provider delivered especially for this study.

3.3   Data analysis

All the data collected for this study was documented and carefully stored. During the research time, the researcher made notes on her observations about the implementation process and the conversations in the company. These notes were made to support the analysis of the interviews. The interviews were recorded, and the recording was transcribed after each interview was conducted.

Thematic coding can be used as a planned and systematic activity to organize the empirical data (Shank, 2002). Coding means finding different patterns and themes from the empirical data and giving them a specific label, i.e., code (Miles & Huberman, 1994). In case study research, the selected theory often creates a basis for the coding process by defining a predefined coding scheme for data analysis (Shank, 2002). The guiding framework of this study about impediments in the technology implementation by Honeycutt et al. (2005) helped to predefine the coding. However, new codes were also identified during the analysis. Raw data (i.e., transcribed interview data) was analyzed constantly during the interview period by reading the data multiple times, after which it was coded and sorted into three themes, including planning, communication, and evaluation, according to the division by Honeycutt et al. (2005). Relevant subthemes were also identified within the three main themes (such as the reasons for implementing a new marketing automation system, benefits and challenges of AI-powered marketing automation, as well as enablers and impediments of the implementation). Identifying the themes made it possible to remove the data irrelevant to this study. Both coding and defining the themes were reviewed several times to ensure the classifications were conducted correctly. Appendix 2 presents the complete list of themes and codes identified in this study. Finally, the results of the analyzed data are presented in the Findings chapter.

4 FINDINGS

The research findings of this study are categorized into planning, communication, and evaluation based on the framework by Honeycutt et al. (2005). Firstly, the planning phase includes the introduction of the case company's reasons and aims for AI-powered marketing automation acquisition and the initial stages of the implementation. Secondly, the communication phase composes the implementation progress and the factors that have affected the implementation in the case company. The third phase, evaluation, includes assessing the new system's performance, evaluating the overall success, learnings from the implementation, and the next steps. Finally, the last chapter composes the results of this research and presents the enablers and impediments for the AI-powered marketing automation system in the case company.

4.1 Planning

Along with the case company's strategic change towards more customer-oriented real-time marketing and customer communication, the company was reorganizing the structures of its customer database and harmonizing the range of its marketing technologies. The company wanted to provide more personalized, relevant marketing communication that serves its customers' needs. Therefore, an AI-powered marketing automation system was acquired to strengthen the case company's strategic marketing.

> We had a lot of different systems and technologies for different channels. The work was manual and channel-specific. Thus, when consumer behavior and how she or he consumes services becomes increasingly complex, it has been really hard for us to keep up with the changes without modern technology. **A**

Before acquiring the new AI-powered marketing automation system, the case company was already using marketing automation, but the capabilities of the old system did not serve its needs anymore. In addition to marketing automation, the company used multiple other technologies for different marketing purposes. Therefore, the company aimed to replace the old technologies with multi-purposed marketing automation. The simplified range of technologies was desired to help manage and coordinate the case company's channels and marketing actions more efficiently.

> One of the drivers has been that our marketing systems have been quite a contraption here and there. That is why we wanted to simplify the technology stack so that there would be only one place and system to manage everything. This change would allow the channels' more versatile and smoother interplay. **C**

4.1.1 Goals and benefits of AI-powered marketing automation

The main goal of acquiring the new marketing automation system was to improve the efficiency of the case company's marketing operations. The interviewees were positive that AI-powered marketing automation would lead to efficiency in operations and resources. In addition, the new marketing automation was expected to reduce manual work. By releasing marketers' time from segmenting and setting up the rules for marketing automation, the employees would have more time for strategic development and content creation.

> We do the same campaign-based on-off type of work all the time. So, over some time, it reduces the amount of operational work, and that time can be shifted to improving the quality of, e.g., content or targeting relevance. **C**

> In the future, AI-powered marketing automation should decide on behalf of people which products or messages are the most interesting to the customer and in which channel. So, the system decides what works best, and then the experts are left thinking about our message or content. **E**

Another goal for the new system was to improve communication with the case company's prospects and customers. The capabilities of AI-powered marketing automation were seen as a possibility for providing valuable content for customers in the complex and fast-changing digital environment. In addition, the technology was expected to help provide more solid customer experiences.

> When we try to do everything by thinking ourselves where and when something should be shown, we are not able to scale it enough because of the number of possible combinations where the customers can visit, how many simultaneous paths they may have, and what kind of data is available of them. Also, we can collect and get more data from different channels all the time. So, we cannot manage that entirety ourselves and ensure that the customer experience and the scaling of the operations are sufficiently personalized without utilizing the capabilities of AI. **A**

AI's capability to learn from customers' behavior and predict their needs was considered a significant benefit of the technology. All eight interviewees felt that the technology's advanced features of tracking, analyzing, and utilizing the data could provide more targeted and personalized marketing that interests the customers. That was expected to lead to more efficient marketing, better alignment of marketing and sales, and better business outcomes. Also, one interviewee pointed out that with better personalization, the system could nurture warmer leads for sales.

> When AI and its adaptive models learn over time, we should get better and better recommendations for the customers. As well as better business results. **D**

> Before, we created the sales leads from a product-oriented or business-oriented perspective. But now, with AI, we can serve sales better by offering warmer sales leads from customers who have shown interest in the product or service. And thereby, this will improve our sales. **H**

With the capabilities of the new marketing automation system, the case company's marketing was expected to change from a campaign-based marketing approach to more customer-oriented, always-on marketing. The interviewees thought that when the focus is changing from the products to the customers, the customers should receive more relevant marketing content when they want to receive it, which is also less disruptive. In addition, the possibility of reacting in real time to changes related to customers' information or behavior was seen as a benefit of AI-powered marketing automation.

> With the new technology, we can provide marketing suitable to our customers' needs. In the old marketing automation system, customers were not at the center. For example, when the company aimed to promote sales of some product, we selected a segment of customers who did not have the product yet. However, it did not consider whether the marketing of the products was relevant for the customer. AI allows us to consider the customers' needs better based on the indicators they have left for us. **H**

> One benefit is speed. The system can react quickly in a more customer-oriented way if there is a change in the customer's information. **B**

The prediction and decisioning capabilities of AI-powered marketing automation were desired to make better decisions than humans could do. The case company had a wide range of products and services that competed for the customers' attention. Therefore, the new system was seen as a possibility to show the right marketing communication for the right customers. When the technology decides which marketing actions are shown for which customers, the case company's different business lines would not need to compete and push their own aims. At the same time, this change supported the aim of moving away from a product-oriented approach.

The AI's decision-making is perhaps more unbiased. When we as individuals make decisions, they are always colored by our starting points and thoughts. So, with the technology, we are giving the decision-making to someone impartial. **C**

AI-based solutions work better than human expert estimations. It helps us leave behind certain feeling-based decisions and rely on the facts the data says we should do. So, I believe sales and customer satisfaction will improve when we can show the relevant messages at the right time. **E**

The system creates a platform and a basis for us to move towards customer-oriented work. Business lines are no longer fighting for the customer's attention. Instead, there is a centralized system where everything we offer is placed, and then the system decides what is the most relevant for each customer. So, it makes it easier for us to move from a product-oriented approach to a more customer-oriented one. **D**

The interviewees recognized more advantages than disadvantages of AI-powered marketing automation, but some disadvantages were identified. The biggest challenge with AI-powered marketing automation was seen in the complexity of AI. The interviewees without a technical background felt it was challenging to understand, especially AI's learning and decisioning logic.

It can be challenging to understand different problem situations because it is quite challenging to build visibility to the system's models. We understand the big picture, but the visibility of how the system works may be weaker than when we had control of the models ourselves. **D**

At this stage, we still do not fully understand how AI works in the background and the basis of the decisions made by AI. Moreover, does AI understand the requirements of our business? **H**

Another technological challenge was the AI's need for a vast amount of data to operate correctly. AI learns from data, and if the quality of data is poor, it may lead to low-quality learning and, consequently, showing the wrong marketing content for the customers. Wrong marketing messages could lead to a weak customer experience or even ethical or data protection issues. At the same time, it was emphasized that AI-powered marketing automation might also help reveal the data quality. Furthermore, one interviewee stressed that the reliability of the system provider is essential because the case company operates in the financial industry and has strict data collection and utilization regulations. However, the provider's reliability was not a problem with the selected AI-powered marketing automation provider.

When we talk about AI, it is machine learning based on data, in which case the quality and coverage of the data are the key. **A**

Without data, there is no AI, but the more data there is, the more difficult it is. On the other hand, the more data there is, the better the different decision-making models and recommendations are formed. **E**

4.1.2   Initial stages of implementation

The case company's RTIM project started in 2019 by defining the vision and long-term objectives, which served as a base for identifying the different marketing automation system providers. The goal was to find a system that meets the needs of the case company and fits its business environment. After identifying the possible marketing automation providers, their number was limited to a few whose suitability for the case company was considered more thoroughly. The acquisition process included several stages where different technology and business requirements were tested and considered. After carefully considering the top two, Pega was selected as the company's marketing automation system provider.

> That acquisition phase was significant for our success. We did it intensively and accurately and put much effort into it. It was clear to us already in the initial phase that we would study a few options more deeply, take the top two, and then go even deeper. **A**

> The comparison of our top two possible software providers was carried out so that we could use multiple streams to study, e.g., marketing automation, machine learning, AI, and other technical capabilities. We also thought about our operational model and developed an idea of what kind of teams we would need for the implementation. So, we used that phase very strongly for planning. **A**

The selection of the marketing automation system included multiple employees in different roles across the case company. In addition, as part of the initial stage, the company arranged workshops that included, for example, designers, business area representatives, as well as marketing and digital sales expertise. Participants had the opportunity to share their views about the technology requirements and participate in selecting the new system provider.

> We involved many people in the acquisition. So, we had a huge workshop to gather business requirements, where, e.g., marketing and sales experts, channel specialists, and designers were involved. Similarly, when we selected the top two, we had many experts in different roles included. They were involved in the acquisition, scoring the participants and telling what their point of view was. So, they were really part of the choice of the system provider. **A**

However, the interviewees working in the operational side emphasized that the acquisition process could have included more employees who would operate the new marketing automation. In addition, the operative team's expertise from

previous marketing technologies would be helpful in further implementation of the new system.

> The technology's background research at the acquisition phase should be investigated even more from the future end users' point of view. And with the users, I mean those who have already done the operational work in the previous systems with the previous data and use cases. Therefore, the know-how of those experts would have been essential and should have been considered more. Perhaps considering if the system suits the operational work would help tackle several implementation challenges. **H**

After the purchase decision was made, the implementation process was swiftly started. Careful comparison and planning in the acquisition phase helped the case company launch the implementation process. From the beginning, the case company had a roadmap for the implementation, which conveyed the upcoming steps and timeline. The big picture of the implementation plan has been mostly held, but the more detailed plan has been reviewed and changed during the implementation. For example, the order of different channels and features was modified during implementation. The order has been prioritized based on the importance of the channels or features for the business and the ease of their implementation. Furthermore, the implementation plan also helped the case company to communicate about the implementation progress.

> When we decided that our marketing automation system provider would be Pega, we could start the implementation process quickly. We did a lot of background work to see if it would succeed. Also, we had thought about team building and already knew whom we wanted for the team, which helped a lot. **A**

> We have integrated the channels and features into the system, even if the order was not the same as in the original plan. The implementation plan has been changed along the way according to what has been learned and what kind of obstacles have arisen in implementing other channels. **H**

> On the other hand, the plans have been essential in that we have been able to constantly communicate to the other teams from whom we need help and at which point. **D**

At the beginning of the implementation process, one team was responsible for implementing the marketing automation system. This team planned and implemented the system for the organization, developed its features, and communicated about the progress and change within the company. As the implementation progressed and the system's users increased, the implementation team was divided into two teams in the fall of 2022: development and operative teams. The development team was responsible for the technical development and implementation of the new marketing automation system. At the same time, the operative team created new use cases and operated the system in practice. The two implementation teams worked closely with shared objectives

and a roadmap for the implementation progress. The interviewees emphasized that the teams were interdependent, so the cooperation required continuous communication and synchronization.

In addition, the case company worked closely with the marketing automation provider. For a year, the system provider's external consultants were part of the implementation team and helped the case company start the implementation process. The interviewees saw support from the system provider as necessary.

Along with implementing AI-powered marketing automation, the case company modified its operations to support the decision-making and flow of information. In addition to the two core teams, the implementation included many other employees and teams across the case company. Therefore, sharing constant information about the progress of the implementation was essential. A digital sales and marketing steering group was established to support the strategic alignments and decisions across the organization. In contrast, an operative steering group included members from all the business areas, and its purpose was to make company-level decisions and monitor results.

> The RTIM project was one of the reasons why we needed the digital sales and marketing steering group. The group was founded at the same time as the system acquisition. The purpose was to make house-level policies and decisions related to the RTIM project. However, not all practical matters could occur in that one group, and we launched the operational steering group, which is more at the team level, where we share information, discuss, and collaborate. **A**

4.2 Communication

4.2.1 The progress of implementation

The case company carried out the first use cases in the new marketing automation system at the beginning of 2022. By the time of this research, the new system had been widely used in different marketing channels, such as mobile and website targeting, email, and SMS. However, using the new marketing automation was still in its early stages, and introducing the new system throughout the whole organization would take time. Therefore, the case company was implementing AI-powered marketing automation gradually, and different business areas, channels, and software features were added to the system step by step.

In a context of large-scale company with a complex organizational structure, the interviewees felt that the implementation process had been fast. The old marketing system was still used alongside the new system, but its shutdown was planned for the near future.

> I have been in this company for so long that I know that the implementation process could have been much slower. **D**

> We have been able to get this done fast. It has led to a rare situation where we seem to be closing down another marketing automation system, which would not run alongside for eternity, like many other systems. **F**

The case company's vision for marketing automation has guided the direction of the whole implementation process. The vision was created before the implementation started and has been communicated actively to different stakeholders. Thus, the employees have been aware of what the company aims for with the new marketing automation and have been willing to work together towards it.

> There has been a good common direction here, and everyone has been working and participating in realizing the vision. **E**

4.2.2 Factors enabling the implementation of AI-powered marketing automation

Several factors contributing the progress of marketing automation implementation in the case company were identified from the interviews. The most critical enabler for the implementation was communication, which was emphasized by all of the interviewees. The case company was actively communicating about the implementation across the organization, and the communication included three main themes: communicating about the change, how the implementation progressed, and the benefits and possibilities of the new marketing automation. The case company's organizational structure was complex, and the implementation included many stakeholders and participants who did not all work in the same departments. Therefore, planned and systematic methods to communicate and share information were found to be critical.

> Constant communication has been necessary so that the people, businesses, channels, dependency entities, and everyone involved understand what we aim for. We continuously inform those stakeholders about where we are going and what changes we have made. **D**

The ongoing communication about the upcoming changes began already before the actual implementation process started. The information was shared, for example, through the two steering groups, monthly newsletter, intranet, demo sessions, and Teams channels. In addition, the experts working on the implementation took part in different internal events and meetings to share information. The company also arranged an internal event with the system provider to engage employees across the organization and increase their overall understanding of the RTIM process and AI-powered marketing automation through lectures and workshops.

Along with increasing knowledge about AI-powered marketing automation, communication was essential to ensure smooth implementation progress. Implementing marketing automation depended on multiple stakeholders, such as channel (e.g., mobile app) development, data development, and product teams. Therefore, the implementation teams informed different stakeholders about the upcoming tasks they would need from them.

> We are constantly communicating about the situation with the stakeholders. If our schedule has changed, e.g., it moves forward one quarter, we need to know if it is still working or if there will be a problem. So, we will have a discussion very much in advance. **A**

Communication was also used to create interest in the new marketing automation within the case company. Different stakeholders were informed about the possibilities and benefits the new technology could provide them. For example, business segments could benefit from more suitable and personalized marketing communication about their products, which could nurture warmer sales leads and increase sales. However, one of the interviewees pointed out that not everyone in the case company knew about the new marketing automation or its benefits because it was still a relatively new technology in the case company and was used only in some business areas.

> Communication about the benefits and possibilities the tool offers has probably created interest in the system. When there is interest, things typically start to progress. **E**

> AI-powered marketing automation is now a tool for marketing teams in limited business areas. It is unknown and has not been introduced in other teams, so there may not be a demand for whether it could be used. If you pick up any colleague in the hallway and ask them to tell everything they know about it, people do not know. Only those who use it day-to-day. **G**

Another critical theme that positively affected the case company's marketing automation implementation was the suitable skills of employees. Implementing and using AI-powered marketing automation required employees with varying roles and skills, such as digital marketing experts, data analysts and engineers, technical developers, content creators, and business leads. However, the interviewees highlighted that the case company had employees with solid technical competence because it had invested in technological development.

> We have a competent team and a good combination of different skills. And then enough drive to carry those things forward. **D**

AI-powered marketing automation was changing marketers' routines and roles. For example, the new system automated some tasks marketers have previously carried out. At the same time, the new system could allocate content more personally based on the customers' individual needs than the previous systems,

which required a more comprehensive selection of content. For this reason, the importance of content creation was increasing and required even more resources.

> The need for some roles may reduce or even end in the future. Specifically, the need for content producers is emphasized and growing. **F**

Along with changing routines, AI-powered marketing automation demanded different employee skills than the old system. For example, the need for more solid technical, analytical, and data-processing skills was highlighted as necessary in the interviews. Not all needed skills or roles were identified beforehand, but the case company learned what competence it would need as the implementation progressed. Although the company had skilled employees, one of the interviewees emphasized that people learn at a different pace, and it may be possible that not everyone can adapt to the change and learn new ways to operate. Therefore, sometimes, employees' suitable characteristics, such as willingness to learn and tolerance of change, could be more important than their previous experience.

> I think not everyone is capable of this. For some of those who have done it in the old world, it can be that the learning curve is just too long. So, maybe we should find the right people to do this. It does not matter what you have done before. More so that you can absorb things and change direction if necessary. **B**

The AI-powered marketing automation required employees to be willing to learn the new system, but the organization supported the learning in multiple ways. The two implementation teams actively developed their competence, had training sessions, and shared their learnings with others. In addition, the system provider's consultants arranged training when new features were introduced. The two implementation teams trained employees across the organization about AI-powered marketing automation and the changes the technology required. The operative team was responsible for training the system users, including a learning path, which included material about the implementation process (e.g., videos and readings) and exercises for training the new marketing automation features in a demo environment.

> I would see that an AI-based tool like this marketing automation is not the most straightforward for everyone. So, there must be a lot of training and learning to get the necessary information across to people. **E**

> It requires a lot of willingness from people to learn new things constantly. Also, it requires the willingness to accept that no one can say this is how it will be in a month because no one knows. That is the strange feature of this process. **B**

Furthermore, employee support was seen as a critical factor in enabling the implementation of AI-powered marketing automation. The implementation included many stakeholders and employees across the case company. Still, all interviewees felt that the employees were supportive and open to the implementation and the changes it brought. Similarly, the cooperation between different stakeholders worked well. Some interviewees even noted that they were expecting more change resistance from the stakeholders, but it has not occurred.

> I have never done development work in such good cooperation, so business and development are the same. I enjoy it so much because, in this project, the idea of agile logic, where business is development and development is business, is happening. **A**

> I had expected that there would be more resistance among stakeholders. Surprisingly, at least at the moment, it is going so well that such a large crowd has a good atmosphere. **C**

> The implementation has been promoted by the teams or employees who have been doing the implementation but also by our business segments. It has been noticed that they have much trust in what the implementation core teams are doing and that this AI-powered system will eventually benefit them. **H**

During the implementation process, the stakeholders were invited to the steering groups to participate in the decision-making and share their thoughts and concerns. Open communication and employee involvement in the decision-making were seen to positively impact employees' support. Some interviewees noted that the stakeholders and different teams had good cooperation before the new marketing automation, which made a good base for support in the implementation process.

> The business segments may have been aware of their challenges, and there has been a need for a solution, and apparently, the new marketing automation has brought the right solutions. On the other hand, I would say that acquiring or implementing new marketing automation is not so new and surprising nowadays. **E**

> Although there are many new people, some have worked together for a long time. So, it has created trust. Maybe also the kind of openness that we can admit that we do not know everything now and must try every new thing out. **C**

Management has also positively impacted the implementation of marketing automation. All eight interviewees expressed that the management has been interested in and supporting the implementation of AI-powered marketing automation. When management supports the acquisition and implementation of the new system, it affects the priority of the implementation processes. The priority has helped to get enough resources, such as time and employees, to move the process forward. However, some interviewees noted that the management had raised some reasonable concerns about AI's possible effects on the business results.

> We have received more and more support from the management, and when we have gotten the management interested, it certainly helps. And through that, we get sufficient priority for different things within the company because there are other competing essential things. So, the project must be high on the priorities so that things progress. **D**

Organizational characteristics were the last identified theme enabling the progress of AI-powered marketing automation implementation. The case company had followed the principles of agile logic in its operations for some years. The interviewees felt that the agile approach helped in the implementation by allowing to learn by doing and making it easier to change the direction when needed. However, the interviewees emphasized that the implementation in the case company has not been purely agile. Instead, one interviewee expressed that the company has been combining the characteristics of both agile and waterfall implementation approaches.

> Agility is essential for the implementation. If we do it with the traditional waterfall model, I believe we would not be anywhere near this far. **A**

> For us, agile development is really like an agile waterfall. First, we work hard to make good plans, and then we start taking it forward. **G**

The case company was a large, well-established business, so the company had enough resources to invest money, time, and competence in the implementation. Similarly, the case company's business area was considered suitable for implementing an AI-powered automation system. As the company was operating in the financial sector, it could gain a lot of customer data, such as information about the customers' life situations, products, and behavior. Therefore, AI-powered marketing automation could utilize rich and extensive customer data.

> As a large company, we can adopt this type of new technology. We can invest in a modern system. We have skilled people and the resources to lead through this kind of implementation. I would say we have a certain type of drive and ambition to be pioneers in some areas. We want to try something new. **D**

> The brand's strength gives us a business reason to invest in this area, specifically in the expertise. We have the ability, money, will, reason, and customers' trust that makes us want to invest in the solutions and process development that then produce marketing. **G**

> This industry is data-producing. In other words, a lot is known about the customers in the financial sector through data. So, it is one that this industry and, therefore, the company promotes that implementation. **B**

4.2.3 Factors impeding the implementation of AI-powered marketing automation

Although the case company's implementation of AI-powered marketing automation had generally progressed well, some organizational factors impeding the implementation were identified. The new system required changes, which challenged the implementation.

The new system demanded adopting new practices, but at the same time, it required new ways of thinking. Moving away from product-oriented marketing to more customer-oriented marketing demanded changing mindsets. With the case company's old marketing automation system, the marketers had decided on the marketing campaigns, content, target groups, and schedule. In contrast, AI-powered marketing automation and its always-on approach is deciding what content it would show for which customers and when. This change demanded that marketers trust the technology and its capabilities to decide which marketing communications are the most relevant for the customers. Losing control of decision-making and trusting the AI's decisioning was seen as challenging. A lack of trust was also influenced by the fact that AI-powered marketing automation was a new technology, and only a few had experience with it. Furthermore, some interviewees emphasized that there was no certainty about whether the AI's decisioning would lead to the best result.

> The way of doing things differs significantly from that of more traditional marketing. We must learn new ways of thinking and new skills, unlearn the old ways of doing, rethink responsibilities and roles, and make it all go beyond the teams and organizational boundaries. Likewise, how do we learn that sometimes the system can make decisions and show things differently than I would like in my team? It is a long journey of change, which we have been doing for many years. **A**

> At least initially, one challenge is knowing how to trust AI. Because it is mainly about trust, we will start to push towards traditional target group-based marketing again if we do not trust it enough. This would break the advantage brought by AI. The biggest obstacle to creating trust is that we have so little experience with AI and do not know what kind of results can be obtained. **H**

> This implementation involves a significant mindset change regarding whether we dare to trust AI. And it makes me and many others wonder if we dare to go for something like this. Will it automatically lead to the best results? Or should we still use our own data models? **F**

The change that the implementation process required included learning new ways to do things so that the old procedures would not be brought to the new marketing automation system. The interviewees recognized that sometimes it would be easier to do things similarly than before. Adopting new practices requires commitment because there is no proof that new marketing automation will provide better results than old practices in every area. Also, many lessons were learned through trial and error, which required flexibility from the employees.

> When doing something new, we have to respect the AI. We had a good start in that the AI makes decisions based on the data, but we have to ensure we will not end up doing the old way again. **C**

> If you have been using something in a certain way for many years, but someone says that you cannot do it this way anymore, it requires quite a lot. There is a risk that the old ways will be forced into this new, significantly different system, even though many things are now different. In the old world, humans decided, whereas in this new world, it is technology. **B**

> When it is a complex and advanced system, so understanding it takes time, and you cannot study everything in advance. You learn either through trial and error or by doing. **D**

Another factor impeding the implementation was the case company's complex organizational structure, which was emphasized by all of the interviewees. For example, AI-powered marketing automation implementation included multiple teams and employees who were not part of the implementation teams. A large number of stakeholders led to dependencies on other employees and teams during the implementation. In addition, the number of stakeholders made coordinating and communicating the implementation challenging. Furthermore, all interviewees stressed that the decentralized marketing functions were creating challenges for the implementation. The case company had multiple marketers and smaller digital marketing teams across the organization. This lack of centralized marketing complicated and slowed the implementation.

> I believe that, especially in a large company, only a few teams are in a position where they could do this type of implementation alone. So, we have many teams with whom we have to cooperate. **A**

> A decentralized marketing organization makes it difficult because we must put much effort into communication, meaning spending much time on it. Someone could say even too much time compared to if the marketing were somehow centralized. **B**

> We do not have a solid centralized marketing function. All the teams are based in different departments or business segments. So, it makes it difficult to operate because there is a lot of coordination, communication, and understanding sharing. **D**

The dependencies of other teams affected how the implementation progressed forward. Implementing AI-powered marketing automation was seen as an essential process in the case company, but similarly, the other ongoing processes required time and resources. For this reason, delays occasionally occurred if the implementation required tasks from the other teams. Thus, the implementation should be a high priority, and stakeholders should be committed to progress, even when surprising situations happen.

> In this large company, a challenge may be that many different teams and units are responsible for specific areas, significantly impacting the whole implementation. So, when those teams are also responsible for other things, and if they have some ad-hoc

tasks, their entire input will be transferred away from our implementation, which slows down its progress. **H**

Another factor complicating the implementation of AI-powered marketing automation was the case company's need for sufficient human resources. Implementing and using AI-powered marketing automation requires a lot of employees with the right type of competence. The challenge of committing the experts was harmful to the implementation, for example, because the learning pace of employees during the implementation was rapid. Thus, if the employees left, much of the know-how was lost. At the same time, it was time-consuming to familiarize new employees with all the information learned during the implementation process. Furthermore, the case company had challenges recruiting employees with the right skills—especially experts with data and technical competence—because experts in this field were competitive. AI-powered marketing automation was a relatively new technology, and knowledge in this field was rare. Therefore, the interviewees highlighted the importance of employees' long-term commitment.

> People change, and new ones come in constantly. So, we should keep them on board and explain this new marketing automation, what we aim for, and how we do things. I think it is difficult and takes time. **D**

> In my opinion, one of the biggest challenges with AI is whether the organization can invest in the team that operates and develops it so that we do not lose human expertise and understanding. We are just passengers if we lose our understanding of how that engine works. **G**

> It has been seen that here in a large organization, employees change roles easily. In other words, expertise may be transferred from this implementation to elsewhere. **H**

The case company's customer data was also identified as an obstacle to the implementation. All interviewees highlighted the importance of suitable data that would fit the needs of AI-powered marketing automation. The case company had been collecting data for decades from multiple data sources. Therefore, the data was fragmented in various systems and locations, challenging its proper use in the new marketing automation. However, the company was streamlining its data structures along with the RTIM project, but the amount of data was vast, and its remodeling took time.

> We have accumulated customer data throughout the decades. Unfortunately, we also have quite old information systems, and our data architecture is fragmented. **A**

> We must bring all the data to the new marketing automation. We also have to build the wholeness of the data from different pieces, which is surprisingly slow and complicated. **C**

Some of the identified challenges regarding the AI-powered marketing automation implementation were related to the case company's business area. The sensitive nature of the financial sector requires data security and data

protection regulations to be considered. These brought some challenges with the compatibility of the case company and the new marketing automation system. For example, extra effort was needed to consider how the data would be sufficiently protected and properly utilized, and similarly, how to modify the features of AI-powered marketing automation to operate if some of the company's messages must be sent to all customers and skip the AI's arbitration.

> We have learned that the processes and features of AI-powered marketing automation do not necessarily correspond to our business's requirements and wishes. In other words, we have had to do much work to tailor the system to meet our needs, but this is partly against the system's original operating ideology. **H**

4.3 Evaluation

4.3.1 Outcomes and learnings of the implementation

At the time of this study, the case company's AI-powered marketing automation system implementation was still ongoing. Still, in the context of a large-scale company, the interviewees experienced that the implementation plan and progress had been successful. The case company had over 250 use cases in the new marketing automation system, which was used, for example, for email, SMS, mobile app, and webpage. The shutdown of the old marketing automation was planned for the upcoming months.

> Considering the complexity, we have succeeded quite well. It may not be possible to say better than expected, but rather that this is how things are going in a big company. It is not a simple task when there are many dependencies and different business segments. **B**

> So far, this implementation has progressed well. It is a big mammoth-like project. There have been some small challenges here and there, but in the big picture, it has progressed somewhat according to the schedule and plans. **E**

Looking back, the case company was ambitious in many steps of the implementation, which have not always been realized. For example, initially, the plan was to shut down the old marketing automation almost two years earlier than the new goal. Because the old marketing automation was still in use and the transition stage from the old system to the new one was ongoing, seeing all the benefits of AI-powered marketing automation was challenging. However, it was already seen that the new marketing automation had enhanced the company's marketing with better targeting of customers. As a result, impressions and click-through rates (CTR) were improved. Also, when the company compared the previous data models it had created and the adaptive data models of the new marketing automation, the system provider's models were performing better. Although the case company's impressions and CTRs have been developing in the right direction, the results were still lower than expected.

> We have not gotten rid of the various tools yet, so after the old systems have been completely replaced and some results have been seen, we can better tell what benefits this has brought. We are still in the transition, so the benefits have not yet been concreted. **E**

> We have kind of competed our modeling and Pega's adaptive models against each other, and we saw that Pega's adaptive models work better. This means that the customers click more on the recommendations, meaning that they find them more attractive because they react positively. **A**

> The results show that the new system has been beneficial in some areas, but we are at the point where we are assessing if the benefits should be more visible. What should be done to ensure that the results would be even better? **C**

Most interviewees emphasized that the company has had challenges following up on the results due to data issues. Seeing the total business value of AI-powered marketing automation has been slow. Building up working reporting had been time-consuming and required much work because the reporting required appropriate data, which has not always been available. For that reason, monitoring the conversion or sales rates was impossible, and the concrete results of the new marketing automation were blurred. One interviewee highlighted that the reporting should have been thought earlier so that the data could be used to optimize the implementation process. However, the case company actively followed the results and had set goals for the results it could already monitor. New reporting dashboards were created based on different teams' needs and helped them independently follow the new system's performance. The implementation core teams followed the daily performance of the marketing automation and communicated the results to the stakeholders. At the management level, the results were discussed in quarterly meetings, where the past quarter's results were discussed, and plans to improve the results were made. In addition, the case company had regular meetings to discuss the results with the system provider.

> We should get reliable monitoring and reporting about what kind of results we have achieved. Now, we are primarily following it through CTRs. However, it should be seen how much sales we have achieved. Also, it should be possible to see Pega's effect compared, e.g., to the old marketing automation. **F**

> Building reporting has been complicated and slow. It is again linked to the data. Getting enough data for the background of the reporting has required much work. So, we cannot report how many contracts, conversions, or euros we make with the marketing automation. **A**

Furthermore, the AI-powered marketing automation system was already seen as helpful in some of the case company's operations. For example, it was already helping the company's aim to move from product-oriented to customer-oriented by forcing it to focus on customer nurturing increasingly. Similarly, the system was already beneficial in releasing marketers' time from activating and de-activating campaigns. However, the implementation still required much

development work besides operating the system. Thus, the expected benefits of releasing the marketers' time for strategic work have not yet been seen.

Implementing AI-powered marketing automation has been an educational process for the case company. The interviewees emphasized that the most significant learning has been how challenging it is to plan the implementation of such a complex technology. Although the case company's plans for the implementation were good, unpredictable issues occurred. The interviewees agreed that it was learned that planning everything is impossible or even unreasonable. Instead, taking prompt actions when problems appear would be more important. One interviewee summarized that AI-powered marketing automation implementation taught the case company a modern way to implement SaaS into its operations.

> At least I have learned from this implementation that planning and scheduling such a massive project in the initial phase is challenging. And on the other hand, it is impossible to be prepared for all the possible changes and obstacles. **H**

> It is good to notice that even with a detailed plan, you cannot prevent all those challenges that will appear along the process. **D**

> With AI-powered marketing automation, we have probably learned a more modern way of implementing SaaS. **G**

Additionally, some technical and human errors occurred while implementing AI-powered marketing automation. For this reason, the interviewees found the error and trial method beneficial. It was also learned that it is essential to be able to abandon the plans and change the direction when needed. Moreover, one interviewee highlighted that a company should have good reasons for implementing such a complex system because it requires a lot of resources and time from the company.

> This implementation process has taught us that we must have agility. If we start doing something now one way, then it is perfectly fine that we later realize that we have to change the direction. **B**

4.3.2 Next steps in the implementation

Although the implementation of AI-powered marketing automation had already progressed for quite established use of the system, the case company had objectives for the subsequent implementation steps. The early stages of the implementation included continuous development and learning to use the system. Therefore, one of the most significant aims for the future was to learn to utilize the system even better. One of the company's next steps was to learn more about how the features of AI-powered marketing automation could be utilized to support its customers' journeys more effectively.

> I would say that one of the goals is that we will start properly utilizing Pega's various features and opportunities. Then, we will start to figure it out and live the day-to-day life. **E**

> The next thing we will probably go for now when we have this new system is how can we manage the fact that when a new customer comes in, how will the customer's relationship evolve, and how will the customer be supported? There is a lot to think about. **C**

Another aim of the case company was to expand the use of the AI-powered marketing automation system. That would include, for example, adding new business segments and users to the system, increasing the number of marketing channels, and introducing new features. The company aimed to provide more omnichannel marketing by adding new channels. Also, the system had many features that could be useful for the company but still needed to be introduced. Therefore, mapping out the new possible features was an ongoing process in the case company.

In addition to the marketing automation features, another critical focus area for the future was to optimize the content creation processes. So far, the case company's focus has been mostly on implementing the technical features into the organization and learning to use the system. However, the company had recognized the importance of content creation and the need for a broader range of content. For example, it had already started to produce more nurturing content and different content variants. However, a more strategic way to produce content for marketing automation was still in progress. Also, the company aimed to understand better how the decision logic of AI-powered marketing automation utilizes content variants and what kind of content the system would need.

> We still need to learn what kind of content we should produce and how Pega could automatically select the best possible variant for that customer from the content library, increasing the conversion probability. **A**

> We are now starting to understand how that system works, so we want to achieve those results by increasing the content. **B**

The new marketing automation system's decisioning models and other AI capabilities were seen as a possibility for the future. Two interviewees emphasized that it needs to be considered if those capabilities could be utilized in the organizational processes beyond marketing.

4.4 Summary of research findings

Changing the marketing automation system was part of the case company's RTIM project, which also defined the vision and long-term objectives for the new technology. When the case company decided to acquire a new modern marketing automation system, it started by comparing the different system providers. The

acquisition phase was systematically carried out, and the different business requirements and technical characteristics were evaluated.

The case company was optimistic about the benefits of AI-powered marketing automation. The capabilities of the technology were believed to help the company, for example, in more effective marketing processes, release marketers' time for strategic work, and target customers with more suitable marketing content. More importantly, the company's focus was expected to change from product-oriented to customer-oriented by changing the decision-making from people to AI. The only concern related to the technology was the complexity of AI features. Understanding AI and its learning and decision-making logic was perceived as challenging.

Overall, implementing AI-powered marketing automation in the case company was considered a complex and time-consuming process. In addition to adopting the new technological features, the successful implementation required changes in the organizational routines.

4.4.1 Enablers and impediments in the implementation

This study identified several factors enabling and impeding the implementation of AI-powered marketing automation in the case company. These factors helped to fulfill the aim of this study, which was to discover how a business can implement AI-powered marketing automation. The main research question was supported by an additional research question about how AI-powered marketing automation changes organizational operations.

The factors affecting AI-powered marketing automation in the case company are presented in FIGURE 4, based on the framework by Honeycutt et al. (2005). In their framework (FIGURE 3), the impediments to SFA technology implementation were recognized in the planning, communication, and evaluation phases. Similar categorization is followed in this work to identify which factors are enabling and impeding the implementation of AI-powered marketing automation in the planning, communication, and evaluation phases. Also, following the original framework, the impact of the factors on the employees and their outcomes are recognized. The factors enabling the case company's AI-powered marketing automation implementation are marked with single borderlines, whereas impediments to the implementation are marked with double lines.

The case company had many factors that enabled the implementation of AI-powered marketing automation in the planning phase. Before acquiring the new system, the company had already defined a vision and goals for the new marketing automation guiding the process. When the purchase decision was made, the company created plans for the implementation that were leading the direction and supported further implementation. Consequently, well-defined goals and implementation plans helped the case company communicate the implementation process to the stakeholders. The initial implementation stage

included many employees in different roles across the organization. Altogether, the well-executed initial stages helped the case company to start the implementation process quickly after the purchase decision.
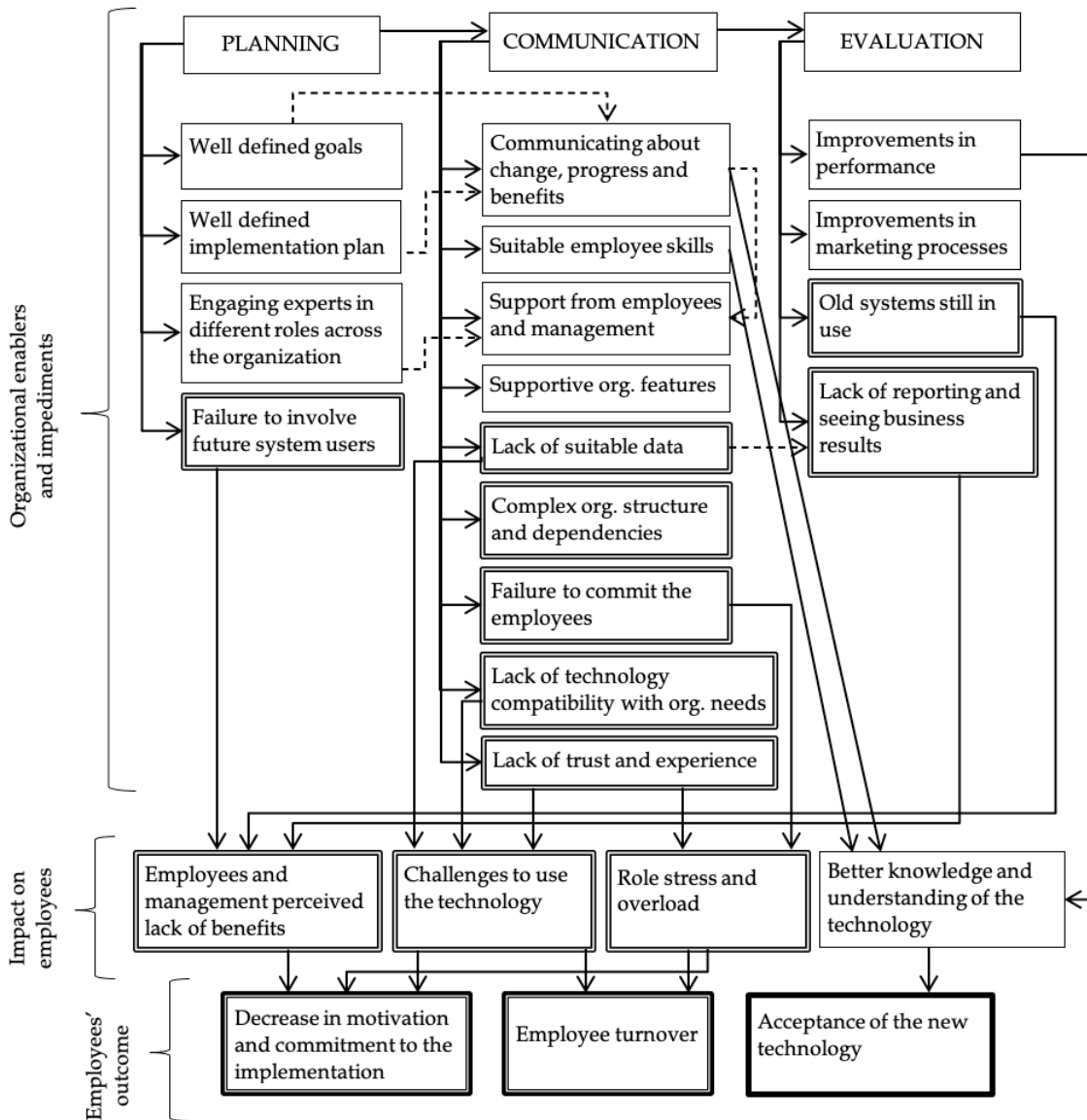
FIGURE 4   Factors affecting in AI-powered marketing automation implementation in the case company

The only factor recognized to impede the implementation in the planning phase was that the future users of the AI-powered marketing automation system were not involved enough. The case company should have involved future system users better because their experience with previous marketing technologies could have helped evaluate how the new system is used in day-to-day operations and avoid possible challenges in the implementation. If the new technology does not fit the users' needs, they might feel it does not benefit them.

Next, in the communication phase, four factors were identified to enable the case company's implementation of AI-powered marketing automation: 1) communication and information sharing; 2) suitable skills of the employees; 3) support from employees and management; 4) supportive organizational features. Communication was the most critical enabler for the implementation in this phase. Open and continuous communication about the changes, implementation progress, or upcoming needs was the key to cooperation between the different teams and stakeholders supporting the implementation process. In addition, communicating the aim and goals of the implementation made it easier for the stakeholders to understand and support the new system and its implementation. Similarly, communicating about the benefits of AI-powered marketing automation increased the employees' understanding and interest in the system.

Employees' practical skills were identified as the second factor enabling the case company's implementation. AI-powered marketing automation requires new competence, such as technical, analytical, and data-processing skills. At the same time, the new system changed some of the existing roles, for example, by automating the routines and highlighting the importance of content creation. Therefore, the employees needed to learn new skills, which the case company supported, for example, by providing training, guide videos, and learnings, as well as a demo environment to practice the new system. However, it was recognized that the employees have different paces and capabilities to learn and adapt to change.

The third critical factor enabling the implementation in the communication phase was the support from the case company's employees and management. The employees were open and supportive towards the implementation process, and change resistance did not significantly occur. Open communication and employees' ability to participate in decision-making helped to gain their support. Management also supported the implementation, helping to get higher priority for the implementation, which in turn helped to have, for example, enough time and human resources.

Lastly, some of the organization's characteristics were identified as fourth enablers for AI-powered marketing automation implementation in the communication phase. The case company followed an agile approach in its operations, and even if its approach was not purely agile, it positively affected the implementation. Another organizational feature that enabled the implementation was the company's capability to invest resources, such as money, time, and competence, to implement the new system. Furthermore, operating in the financial sector helped the case company to collect a lot of rich and good quality customer data that AI-powered marketing automation could utilize.

The communication phase also included some impediments to the case company's AI-powered marketing automation implementation. The five identified impediments were: (1) lack of suitable customer data; (2) organization structure and dependencies on other teams; (3) challenge to commit and hire the right employees; (4) lack of technology compatibility with the organization's needs; (5) lack of trust and experience. However, previous studies have identified

change resistance as one of the main impediments to technology implementation (e.g., Barker et al., 2009; Wright et al., 2008). Still, this study did not identify change resistance towards AI-powered marketing automation implementation in the case company. Thus, the findings indicate that well-defined goals and preliminary implementation plans may help employees see the implementation of AI-powered automation as an opportunity to enhance marketing and customer-centricity, which can reduce change resistance.

The first impediment in the communication phase was the case company's data. AI requires a lot of good-quality data, and the company has collected vast amounts of customer data over decades. However, the data was fragmented into different systems, and therefore, the company struggled to create an overall view of the data and introduce it in the correct format for the new marketing automation. At the same time, the data issues challenged seeing the results and the building of functioning reports for the marketing automation performance.

The second factor challenging the implementation of AI-powered marketing automation in the communication phase was the case company's complex organizational structure. Multiple employees and teams across the organization were included in the implementation. Therefore, the implementation depended on different stakeholders, leading sometimes to delays. The case company had decentralized marketing functions, and the experts were spread across the organization, which created more dependencies. Similarly, a large number of stakeholders challenged the communication and coordination of the implementation.

The third impediment in the communication phase was the challenge to commit and hire the right employees. Because the implementation and learning pace was fast, much essential expertise and knowledge of the implementation history was lost if the employees turned over. In addition, it took much work to recruit new employees, especially those with data and technical skills. The unfilled roles affected other employees' workloads and hindered the implementation's progress. Similarly, teaching new employees required time and resources from the other employees, which was away from the implementation.

Challenges in the compatibility of the new marketing automation with the case company's operational and organizational needs were the fourth impediment of the communication phase. Some features of the AI-powered marketing automation demanded a lot of development and resources to operate as the industrial and organizational needs required. At the same time, these incompatible features made it difficult to use the technology in some areas as it was supposed to be used.

The last and fifth impediment in the communication phase was the employee's lack of experience and their challenges to trust the new system. AI-powered marketing automation required changes in the employees' routines and mindset. With the old marketing automation system, marketers controlled which marketing communication was shown to which customers. In contrast, with the new system, the AI features were deciding what content would be shown to

whom. AI-powered marketing automation was not yet an established technology, and giving control to a technology that was not fully understood felt challenging. The change demanded that marketers trust AI's capabilities to learn and allocate content to the right customers. However, there was not yet certainty that outsourcing the decision-making for AI would lead automatically to the best results. Consequently, employees' lack of trust and experience of AI-powered automation could cause uncertainty and challenge its use.

Lastly, in the evaluation phase, two factors enabling the marketing automation implementation were recognized. Even the case company was not yet able to follow all the results, based on the impressions and CTRs, the AI-powered marketing automaton had improved its marketing performance. Similarly, the decisioning models allocating which marketing communications are shown for which customers, were more effective in the new system than the ones the case company had created itself. Tracking the marketing performance helped to understand the system better and react when needed. In addition, the new marketing automation was improving the company's marketing processes, for example, by changing the focus to more customer-oriented and reducing manual work.

The evaluation phase also identified two impediments to AI-powered marketing automation implementation. The transitional phase was ongoing, and the old marketing automation was still in use, making it challenging to see the full benefits of the new system. Similarly, another challenge in this phase was that all the results, such as conversion or sales rates, were not yet seen. At the same time, measuring the results and building up the reporting were challenging due to data issues. For these reasons, evaluating the business value or success of the new marketing automation was not easy.

4.4.2 Outcomes of the implementation

The results of this study help answer the last additional research question, which aimed to explore the pitfalls of AI-powered marketing automation implementation. The implementation outcomes were related to the factors enabling and impeding the implementation of AI-powered marketing automation. Employees' role in the AI-powered marketing automation implementation was noticed to be vital in the case company. The organizational enablers and impediments impacted employees, influencing their outcomes regarding the new technology and its implementation process. For this reason, the employees' experiences and attitudes toward the new system could significantly impact the success or failure of the whole AI-powered marketing automation implementation.

The results indicated that some of the impediments identified in the case company had a negative impact on employees, whereas some enabling factors had a positive impact. In general, those factors enabling the implementation had a positive effect by increasing employees' knowledge and understanding of the

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technology and its implementation process. Moreover, these impacts supported the employees' acceptance of the AI-powered marketing automation system. By contrast, some of the impediments in the implementation were noticed to have a negative impact on employees by 1) decreasing how employees and management perceived the benefits of the new technology, 2) creating challenges to use the new marketing automation system, and 3) causing the stress and overload for the employees. These were related to the employees' negative outcomes, including their decreased motivation and commitment to the technology and its implementation or even their turnover.

All in all, implementing AI-powered marketing automation in the case company was successful in many respects. The implementation progressed well, and the new marketing automation helped the case company provide more targeted and personalized marketing that better served its customers' needs. The implementation shaped the organizational operations and supported the company in adopting a more modern approach to technology implementation.

Implementing AI-powered marketing automation was found to be a complex process that included multiple unexpected situations requiring flexibility. Also, technical and human mistakes occurred, and learning from the errors was continuous. Therefore, a flexible implementation approach was needed, and it was found that making strict long-term plans was unreasonable. However, the case company's plans and pace for the implementation were seen to be good, and the plans were revised along the process.

The case company's AI-powered marketing automation implementation process was still ongoing at the time of this research, but the new system was starting to become more established. Therefore, the company wanted to learn to use the system more efficiently to be able to shut down the old marketing automation system. The aim for the future was also to expand the use of marketing automation in the organization and introduce new features, channels, business areas, and users to harness the full potential of the technology.

5   DISCUSSION

This study examines the organizational factors that may affect the implementation of AI-powered marketing automation. It also offers theoretical and managerial contributions and some suggestions for future research.

5.1   Theoretical implications

The findings of this study suggest four theoretical contributions. First, this study contributes to the marketing automation literature by clarifying the concept and features of AI-powered marketing automation. In line with previous studies, it was found that AI can enhance a company's overall marketing with its efficient capabilities to collect, analyze, and utilize data, predict customers' behavior, and target them more effectively (e.g., Davenport et al., 2020; Ma & Sun, 2020). The findings of this study indicate that marketing automation has a vital role in harnessing the features of AI in the use of marketing. Moreover, it seems that integrating marketing automation with AI can enhance the capabilities of marketing automation systems. AI's capabilities to process data and learn quickly help identify customers' behavioral patterns and understand their needs (e.g., Kumar et al., 2021; Ma & Sun, 2020) were also found to be at the core of AI-powered marketing automation. These features seem to support AI-powered automation as a self-learning system that allows higher adaptivity for marketing, for example, by predicting customer behavior and learning from feedback. In addition, AI seems to allow marketing automation to optimize more relevant content and deliver it in real-time in a more suitable format and channel for the customer than marketing automation systems that do not utilize AI capabilities. Furthermore, this study identified the different marketing automation features where AI could be utilized and, thus, elaborates the framework by Heimbach et al. (2015) by demonstrating the operational logic of AI-powered marketing automation (FIGURE 2). The findings indicate that integrating AI and marketing

automation can increase marketing efficiency and allow more automatized processes, reducing manual work.

As the second contribution, this study increases knowledge on implementing AI-based systems by identifying the factors enabling and impeding AI-powered marketing automation implementation. Therefore, the study helps to fill the gap in the academic literature on empirical and implementation perspectives of AI-based systems in marketing (Anayat & Rasool, 2022). This study identifies multiple organizational factors that are connected to the success of AI-powered marketing automation implementation, including, for example, well-defined goals and implementation plan, involvement of cross-functional teams, continuous communication, employees and management support and commitment, technological and organizational readiness, employees' suitable competence, change management, improvements in processes and performance, and well-defined evaluation metrics. Thus, it seems that the factors supporting AI-powered marketing automation implementation were in many respects in line with the enablers and impediments identified in previous studies regarding marketing automation, CRM, and SFA implementations (e.g., Barker et al., 2009; Honeycutt et al., 2005; King & Burgess, 2008; Nguyen et al., 2007). Similarly, AI-powered marketing automation implementation seems to align with the findings by Mero et al. (2020), who found that a successful marketing automation implementation relies on the strategic changes of the organizational structures, processes, and customer-centric culture. However, this study agrees that AI-based systems differ from previous marketing technologies due to exceptional speech and human-like elements (e.g., Kumar et al., 2021; Ma & Sun, 2020). AI needs a vast amount of good-quality customer data (Davenport et al., 2020), and therefore, the findings indicate that implementing AI-powered marketing automation highlights the importance of a company's data management and suitable technological infrastructure even more than the previous marketing systems. In addition, the study proves that implementing AI-powered marketing automation requires a suitable business area that produces a lot of high-quality customer data so the system can work properly. Still, it seems that the poor data quality or challenges in getting the data to flow for the system may impede the implementation of AI-powered marketing automation. It was also found that data issues can prevent reporting and seeing the system's benefits. Furthermore, AI's decisions may be hard to understand (Gaczek et al., 2023), and this study shows that AI-powered marketing automation implementation needs data-oriented marketers with good technical skills. Therefore, implementing AI-powered marketing automation seems to require more technological and analytical competence from marketers than the previous marketing systems.

As a third contribution, this study helps to increase the understanding of employees' roles in the AI-based highly automated marketing environment. The findings indicate that AI-powered marketing automation is changing marketers' roles as operators of the system, who create ruling conditions for AI, monitor the performance of automated marketing, and react to and modify the marketing

automation process. At the same time, it seems that integrating AI tools with marketing automation complicates the marketing automation technology even more, for example, by challenging the transparency of the decisioning logic or locating errors. In addition to new skills, it was found that AI-powered marketing automation requires a substantial mindset change. The study shows that moving away from campaign-based marketing, where humans have decided the marketing automation rules, towards highly targeted, always-on marketing, where AI algorithms make the decisions, requires employees' trust in the technology. It also seems that the full benefits of AI-powered marketing automation are not gained if the decisioning of segmentation and targeting is not transferred from humans to the system or the AI-based decisions are not trusted. Aligned with Gaczek et al. (2023), it seems to help if AI is accepted as a decision-making team member with whom the employees collaborate. In addition to technological competence, the findings indicate that AI-powered marketing automation implementation benefits from employees who are willing to learn, flexible, and can tolerate changes. Altogether, this study's findings align with the studies regarding other marketing technologies (e.g., Alshawi et al., 2011; Honeycutt et al., 2005; Murphy, 2018), emphasizing that employees' role in AI-powered marketing automation implementation is vital. Employees' experiences and attitudes toward AI-powered marketing automation were found to significantly impact the success or failure of the implementation.

As the final contribution, this study helps to clarify the implementation process of complex marketing technology in a large company from the perspective of AI-powered marketing automation implementation. Although the set-up of SaaS is technically easy (Keens & Barker, 2009; Mero et al., 2022), this study proves that implementing an AI-powered marketing automation system requires a lot of resources, significant organizational changes, and a flexible implementation approach. The findings show that a large company may have the resources that AI-powered marketing automation implementation requires, such as enough customer data, human resources, employees' competence, and sufficient time. However, the findings indicate that a large company might emphasize the complexity of AI-powered marketing automation implementation, for example, due to its challenging organizational structure, dependencies, a wide range of existing technologies, or fragmented customer data. Furthermore, this study aligns with Lahtinen et al. (2022) that organizational processes and operations often change slowly in a large company. In contrast, the findings show that AI-powered marketing automation requires a flexible implementation approach, quick reactions, and the possibility to change the direction of the implementation if needed. Therefore, this study supports the idea that, as with other marketing technologies (e.g., Mero et al., 2020; Mero et al., 2022), AI-powered marketing automation implementation will benefit from an agile learning-by-doing approach. Creating long-term detailed plans for implementation seems unreasonable because unexpected situations will occur. Also, AI-powered marketing automation was identified as a relatively new technology with constantly evolving features. However, this study proves that

the initial stages of a large company's AI-powered marketing automation implementation require careful preparation. Thus, the study recommends defining the goals and a preliminary implementation plan to identify and solve, for example, the dependencies or challenging organizational or technological structures beforehand. Altogether, the findings show that implementing AI-powered marketing automation in the case company balanced between agile and more linear implementation approaches, thus agreeing with the findings by Mero et al. (2020) that large companies use both causal and effectual reasoning.

5.2 Managerial implications

This study provides multiple managerially relevant perspectives on AI-powered marketing automation implementation. It provides insights to managers who are considering the acquisition of AI-powered marketing automation or are in the early stages of the implementation. The findings of this study help managers understand the concept of AI-powered marketing automation by explaining its benefits and operational logic, as well as clarifying how integrating AI changes marketing automation (FIGURE 2). Additionally, the findings of this study guide managers and help them avoid pitfalls in their AI-powered marketing automation implementation by composing the factors that enable and impede the implementation (FIGURE 4).

Managers must understand that although AI-powered marketing automation seems to create promising benefits for marketing, the findings show that its implementation requires long-term commitment, sufficient resources, and organizational changes. Multiple organizational factors were found to affect the success or failure of AI-powered marketing automation implementation, and even though this study helps managers identify the possible factors impeding the system implementation, it is impossible to identify all of the organizational challenges that may occur. Therefore, this study suggests that companies adopt an agile implementation approach when implementing AI-powered marketing automation. It allows a gradual implementation of technological features and organizational changes via learning by doing. The findings indicate that when implemented successfully, AI-powered marketing automation likely adds value for the company and helps it reach its goals through AI's supreme automation and targeting capabilities.

The findings show that employees significantly impact the success of AI-powered marketing automation implementation. It was identified that organizational factors impact employees' experiences and attitudes toward AI-powered marketing automation. Employees' knowledge and understanding of the system seem to support their acceptance of AI-powered marketing automation. In contrast, a lack of employees' perceived benefits of AI-powered marketing automation, challenges to use it, or stress and overload created by the change seem to lead to decreased motivation and commitment towards AI-

powered marketing automation or even employee turnover. Thus, managers should try to foresee and avert the factors impeding AI-powered marketing automation implementation to support employees' acceptance of the system. Furthermore, the findings show that AI-powered marketing automation releases marketers' time, for example, by outsourcing the segmentation and creation of marketing automation rules from marketers to the system. Instead of seeking fully automated processes, this study suggests that managers integrate AI with marketing automation to augment human capabilities. Marketers' time released by the automated tasks could be used for more complex tasks, such as strategic planning and content creation. Although AI-powered marketing automation can make decisions independently and learn fast from data, it is still not guaranteed that the results will always be optimal or that AI will understand the business requirements. Thus, AI-powered automation seems to require humans to monitor, react to, and modify the marketing automation process.

This study proves that AI-powered marketing automation is a complex technology that changes traditional marketing roles. Managers should be aware that the system seems to require marketers' deeper competence in the technical, analytical, and data-processing fields than the previous marketing technologies. Applying AI with marketing automation moves the decisioning of targeting conditions from humans to the system. This change was found to enhance targeting, for example, with better prediction, speed, and accuracy. However, it was also identified to impact the transparency of the marketing actions, challenging the understanding of AI's decisioning logic, for example, of who, why, when, and in which channels the customers are targeted. Similarly, due to the complexity of AI technologies, including a high amount of data, it seems more challenging to locate the causes of errors with AI-powered marketing automation than with previous systems. Still, the findings indicate that to gain the full benefits of AI-powered marketing automation, the employees must cooperate with AI and trust its decisions. Trusting AI algorithms was identified to require a mindset change, which may be challenging, and the employees may feel a loss of control from transferring the decisioning for a technology. Thus, managers must support employees in increasing their understanding of the technology and provide sufficient time and training to help them learn to use the new system.

To support AI-powered marketing automation implementation, managers should recruit employees who understand AI's operational logic, are willing to learn, and are flexible enough to change their working methods. The findings indicate that personal characteristics that support the implementation may be more important than the previous experience of AI-powered marketing automation. However, it was identified that recruiting employees with sufficient technological competence and suitable personal characteristics that support the system implementation may be challenging. Moreover, the learning curves of the employees working with AI-powered marketing automation implementation seem to be fast. Therefore, if the employees leave, they might take a big part of their knowledge with them, which challenges the implementation even further. Thus, the findings highlight that it is essential for managers to commit the

employees working in critical positions within the AI-powered marketing automation implementation.

AI-powered marketing automation highlights the requirements of customer data amounts and quality more than the previous marketing technologies. AI learns from data, and if the data gets distorted, the learning can be misdirected or biased, and its predictions falsified. It was identified that poor-quality data could lead to ethically questionable situations where AI-powered marketing automation provides marketing communication to the wrong recipients, harming customer relationships or even the whole business. Therefore, this study showed that to work optimally, AI-powered marketing automation needs accurate and good-quality data to harness the full potential of AI to provide reliable predictions to target customers with the right content, channel, and time. Also, it was found that the more personalized targeting by AI-powered marketing automation was gaining more positive customer reactions than the previous marketing automation. This study suggests that managers ensure that the company's customer data collection processes are in place and that required data is available to AI-powered marketing automation in a correct format even before starting the implementation. Furthermore, the findings proved that a lack of suitable data may hinder reporting and prevent employees and managers from seeing the business benefits of AI-powered marketing automation.

Another topic managers should consider in the initial stages of AI-powered marketing automation implementation is evaluation metrics. AI-powered marketing automation is still a new technology, and its effect on marketing and business is challenging to evaluate beforehand. It was found that poorly defined evaluation metrics may negatively affect the implementation. Therefore, the findings indicate that carefully planned metrics that are linked to the company's objectives of AI-powered marketing automation are essential for evaluating the success of the technology and its implementation. However, this study did not prove that transferring the decision-making of all marketing actions to AI-powered marketing automation would automatically lead to the best results. For this reason, it is recommended that managers should evaluate the results, consider if AI is beneficial in all business areas, and try to find the optimal balance between humans and AI's decision-making. Moreover, it may occasionally be reasonable to abandon some practices or technological features of AI-powered marketing automation and rely on old working methods.

Overall, this study proves that implementing AI-powered marketing automation in a large company requires a lot of time and resources. The system also needs a suitable business environment that generates a lot of customer data. Therefore, before starting the implementation, managers or other decision-makers should consider whether AI-powered marketing automation suits their business.

5.3   Limitations and future research

It is essential to evaluate the quality of this study. This study aimed to clarify the concept of AI-powered marketing automation and increase understanding of how the technology can be implemented. This attempt was achieved by using a case study strategy. The research phenomenon was examined through case organization interviews and observation of the case company's AI-powered marketing automation implementation. Furthermore, the study formed conclusions carefully and presented all the steps of the analysis for the reader. As often in a case study, the findings of this study are limited in terms of statistical generalizability, which is typical in qualitative research (Yin, 2014). Instead, this study aimed to achieve analytical generalizability to extend the findings beyond the context of this research (Yin, 2014). The analytical generalizability of this study was improved by applying the theoretical framework by Honeycutt et al. (2005) that guided the categorization of the factors affecting AI-powered marketing automation implementation. This led to identifying a set of enablers and impediments and their impact on AI-powered marketing automation implementation. Although the details of the enablers and impediments may vary across the organizations, identifying these factors and their impact increases understanding of AI-powered marketing automation implementation and is especially useful for companies planning to implement the system.

The reliability of the study refers to its repeatability (Yin, 2003). This study provides readers with detailed and transparent documentation of data collection, analysis, and processes. Therefore, if someone would replicate this study, the research would be easily repeated in another context. However, the interview data was collected through semi-structured interviews with additional questions based on the interviewee's answers. For these reasons, the interview data could differ if the study is conducted in different organizations and by different interviewers.

Along with an increasing understanding of AI-powered marketing automation implementation, this study points to interesting research ideas for future research. This study focused on only one large-sized company operating in the financial services. The size of the company and industry characteristics may affect the findings of this study. For example, AI-based systems are suitable for industries that utilize a lot of data and have multiple touchpoints with many customers (Davenport et al., 2020), meaning that the financial sector is especially suitable for implementing AI. For this reason, the results of this study cannot be generalized to companies of all sizes and industries. Thus, future research could adapt this study to other types of organizations to explore if the factors affecting the implementation of AI-powered marketing automation are similar, for example, in start-up and B2B companies or businesses operating in different industries.

The starting position and readiness for implementing AI-powered marketing automation may differ across companies. The case company had its

own organizational culture, structures, and processes that have affected this study. Similarly, the case company strongly focused on developing its digital services and investing in technological development. The implemented AI-powered marketing automation was not the first marketing technology for the case company; instead, it had implemented other marketing automation systems in the past. In addition, the case company had already adopted an agile operating culture before implementing AI-powered marketing automation. Therefore, future research could study how organizational culture and experiences from previous marketing technology implementations affect the progress and outcomes of AI-powered marketing automation implementation. For example, this study did not identify change resistance toward AI algorithms or system implementation, and the findings indicated that the case company's organizational operations helped reduce change resistance.

Furthermore, this study focused on marketing automation only from the organizational perspective. Studying how customers experience and react to the communication provided by AI-powered marketing automation would be beneficial for a deeper understanding of the system. Similarly, the use of generative AI in marketing was only discussed briefly in this study, although this rapidly developing technology is forecasted to be used increasingly in marketing. Therefore, more profound research on its impact on marketing automation would be needed.

The results of this study provide valuable information about the integration of AI and marketing automation, as well as the implementation of AI-powered marketing automation, by identifying factors that affect the implementation. This study aimed to be as objective as possible. However, qualitative research requires interpretation, which may lead to authors' biases or disregard of important information. As a single case study, the results cannot be largely generalized. Therefore, more research about AI-powered marketing automation and its implementation is needed to validate the findings of this study.

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APPENDICES

APPENDIX 1: Interview questions

- What has your role been in the implementation of AI-powered marketing automation?

- What steps has the implementation included?

- How has the implementation process progressed so far?

- What are the benefits of an AI-powered marketing automation system?

- What kind of constraints are related to an AI-powered marketing automation system?

- Which factors in the organization support implementing AI-powered marketing automation?

- Which factors in the organization hinder the implementation of AI-powered marketing automation?

- How was the implementation of AI-powered marketing automation planned?

- What has been achieved so far?

- Have the results of AI-powered marketing automation been as expected?

- What are the aims of AI-powered marketing automation in the future?

- What are the next steps of the implementation?

- What has been learned from the implementation process?

APPENDIX 2: Codes and themes of data analysis

Themes	Subthemes	Codes
Planning	Objectives for a new system	Modern technology that suits the organization
		Willingness to be more customer-orientated
		Replacement and harmonization of previous systems
	Benefits of AI-powered marketing automation	More efficient operations
		More efficient use of data
		Better targeting and personalization
		More efficient decisioning
		Reduced manual work
		Real-time capabilities
		Better lead management
	Challenges of AI-powered marketing automation	Information and data security
		Need a high amount of good-quality data
		Unclear decisioning-logic
		The continuous need for validation
		Limitations of AI models
	Preparations for the implementation	Comparison and selection of system provider
		Involving different roles in the decision-making
		Creation of an implementation plan
		Rapid starting progress
	Participation of cross-functional teams	Cooperation across teams
		Steering groups
		Cooperation with the system provider
Communication	Communication about the implementation	Communication about the change
		Communication about the progress

		Communication about the possibilities
	Suitable competence	Skilled employees
		New and changing roles
		Employees' personal characteristics
		Training and learning
	Adopting new practices	Mindset change
		Sufficient knowledge
		Commitment to the change
	Organizational features supporting implementation	Employees' support
		Management's support
		Comprehensive involvement in decision-making
		Agile operations
		Sufficient resources
		Suitable industry
		Experience with large-scale system implementations
	Organizational features hindering implementation	Dependencies
		Decentralized marketing
		Prioritization
		Allocation of resources
		Employee commitment and turnover
		Unsuitable and fragmented data
		Business limitations
		Compatibility of the technology and the business requirements
Evaluation	The progress of implementation	New marketing automation is widely used
		Rapid progress with use cases
	Monitoring results	Creation of a reporting model
		Continuous monitoring
		Improved results
		Challenges to see business value

	Implementation outcomes	Realization of plans
		Decommission of old systems
		Moving towards customer-centricity
		Facilitating routine tasks
	Learnings for future	The difficulty of planning
		Learning by trial and error
		Modern implementation methods
		Justified reasons for the implementation