



**Vaasan yliopisto**  
UNIVERSITY OF VAASA

Fiia Ristola

**AI-enhanced customer engagement and sales growth: Exploring  
the potential and the challenges**

Case study

School of Management  
Master's thesis in Strategic  
Business Development

Vaasa 2024

---

**UNIVERSITY OF VAASA****School of Management****Author:**

Fiia Ristola

**Title of the Thesis:**

AI-enhanced customer engagement and sales growth:

Exploring the potential and the challenges

**Degree:**

Master of Science in Economics and Business Administration

**Programme:**

Strategic Business Development

**Supervisor:**

Anni Rajala

**Year:**

2024 Pages: 65

---

**ABSTRACT:**

Tekoälyn nopea kehittyminen liike-elämässä tekee siitä yhä merkittävämmän työkalun yrityksille, jotka haluavat pysyä kilpailukykyisinä digitaalisesti kehittyvillä markkinoilla. Tekoälyllä tiedetään olevan keskeinen rooli asiakassuhteiden syventämisessä, asiakaspalvelun personoinnissa ja kehittämisessä sekä myynnin kasvattamisessa. Vaikka tekoälyn potentiaali liiketoiminnan mullistajana on laajalti tunnustettu, monet yritykset kamppailevat edelleen sen täysimittaisen hyödyntämisen kanssa. Tämä tutkimus syventyy, kuinka tekoälyä voidaan hyödyntää asiakkaiden sitouttamisessa ja myynnin tehostamisessa, vastaten yritysten akuuttiin tarpeeseen sopeutua jatkuvasti muuttuviin markkinavaatimuksiin ja teknologiseen kehitykseen.

Kvalitatiivisen tapaustutkimusmenetelmän avulla tutkimus syventyy yksittäisen organisaation konkreettisiin kokemuksiin, sekä tarkastellaan heidän kuluttajillensa suunnatun tekoälytyökalun vastaanottoa ja sen vaikutusta liiketoimintaan. Haastattelujen ja datan analysoinnin avulla tutkimus tarjoaa oivalluksia tekoälyn käytön toiminnallisista haasteista ja mahdollisuuksista, keskittyen erityisesti siihen, kuinka tekoälyä voidaan hyödyntää asiakassuhteiden kehittämisessä ja myyntiprosessien tehostamisessa.

Tutkimuksesta nousee esiin oivalluksia, jotka osoittavat kaksijakoisuutta yrityksessä: tekoälyn mahdollisuudet mullistaa asiakaspalvelu ja myynti on ilmeistä, mutta sen täydellistä integraatiota estävät monet sisäiset haasteet. Tutkimus paljastaa, että vaikka tekoälypohjaiset työkalut voivat luoda kiinnostavampia ja räätälöityjä asiakaskokemuksia, niiden tehokkuus riippuu yrityksen sopeutumiskyvystä ja sen sisäisten prosessien ennakoivasta kehityksestä. Tutkimus havaitsi myös, että toistaiseksi tekoäly nähdään enemmänkin apuna tehostamaan työprosesseja, ei niinkään korvaamaan niitä. Tehdyissä päätelmissä korostetaan tarvetta yhteisiin pyrkimyksiin kohti organisaation valmiutta ja puolustetaan kokonaisvaltaista lähestymistapaa, joka kattaa tekoälykoulutuksen, eettisen käyttöönoton ja siirtymisen kohti datakeskeisiä toimintamalleja.

---

**KEYWORDS:** Artificial Intelligence, Sales growth, Customer Engagement, Organizational Change

## Contents

1	Introduction	6
2	Theoretical background	9
2.1	Defining artificial intelligence	9
2.2	Exploring AI's role in elevating customer engagement and sales	11
2.2.1	The effect of customer engagement on sales	15
2.2.2	Adapting to Rising Customer Expectations in the Digital Era	15
2.3	The Utilization of AI in Business	17
2.4	Challenges in utilizing AI in business	20
2.5	Theoretical framework: AI-enhanced customer engagement and sales growth	23
3	Methodology	25
3.1	Research approach	25
3.2	Data collection	27
3.3	Data analysis	30
3.4	The assessment of the quality of the data	31
3.5	The case company	32
4	Findings	34
4.1	The current state of artificial intelligence in the case company	34
4.1.1	Comparison of Supervisors' and Employees' views	37
4.2	Improving the customer experience with the help of artificial intelligence	39
4.3	Enhancing Sales and Business Growth Through Artificial Intelligence	42
4.3.1	The effects of an AI-based application	44
4.4	Summary of the findings and the revised framework	48
5	Discussion	51
5.1	Theoretical contribution	51
5.2	Managerial implications	52
5.3	Limitations	53
5.4	Suggestions for future research	54
6	References	56

7	Appendices	64
	Appendix 1. The Interview	64
	Appendix 2. Interviewee's summary	65

## Figures

Figure 1 The difference of artificial intelligence, machine learning and deep learning (Srivastava et al., 2023)	10
Figure 2 How AI in sales is changing the selling process (Attarbashi, 2023)	13
Figure 3 Sales success matrix (Dickie et al., 2022)	14
Figure 4 AI possibilities in business	17
Figure 5 Roadmap for AI business model implementation (Reim et al.,2020)	18
Figure 6 Most common ways companies are using AI in 2023 (Cardillo, 2023)	19
Figure 7 Challenges of implementing AI in businesses	21
Figure 8 Theoretical framework	23
Figure 9 Benefits for the case company of using artificial intelligence in ecommerce for customers	45
Figure 10 Empirical framework	48

## Tables

Table 1 Interviewee's summary	28
Table 2 Comparison of Managers' and Employees' Perspectives Regarding Artificial Intelligence in Their Work and Organization	38
Table 3 User's opinions after using artificial intelligence application (according to case company statistics)	46
Table 4 Customers experiences on whether using AI tool was helpful in finding a new home (according to case company statistics)	46

## 1 Introduction

Artificial intelligence offers multiple opportunities to enhance the intelligence of business operations by opening doors to customization and optimization, enabling the creation of products and services that align more precisely with customer preferences (Singh et al., 2019). The power of AI to reimagine and reinvent for example sales strategies and operations suggests that we are on the cusp of a new era, where digitization and artificial intelligence could eclipse the influence of any previous technological advances in sales (Singh et al., 2019, p.17). In an era of ever-rising customer expectations driven by digital transformation, improving the customer experience poses a growing challenge for companies (Daqar & Smoudy, 2019).

A study by Dickie et al. (2022) highlights a critical inefficiency in the sales sector, where a mere 32% of salespeople's time is dedicated to their primary sales duties, with the remainder consumed by administrative and non-productive tasks. This statistic opens the dialogue on AI's potential role in automating these tasks, thereby liberating sales professionals to focus on what they do best—sell (Dickie et al., 2022). AI-powered tools are not just a futuristic concept but a present-day reality, reshaping the way businesses operate and engage with their customers (Singh et al., 2019, p.17).

Despite the potential, the adoption of AI in business operations varies significantly (Velu & B, 2020). While numerous studies, such as those by Bughin et al. (2018) and Hussain and Ahmed (2023), have highlighted the potential and initial implementation of AI in businesses, they also indicate that the full scope of AI's capabilities remains largely unrealized. Additionally, Bharadyanthe (2023) emphasizes the importance of understanding the value and potential of AI, pointing to a gap in comprehensive knowledge and strategic application of AI in the business sector. The literature is replete with evidence of AI's transformative power on the economic system and individual companies (Soni et al., 2020). Yet, a report by McKinsey & Company (2023) indicates that only 8% of companies have widely adopted AI, and 23% are in the pilot or

experimental phase, suggesting a crucial gap in understanding and implementation. (McKinsey & Company, 2023)

Although the presence of artificial intelligence has been observed in thousands of companies, the huge opportunities it offers have not yet been fully realized (Bughin et al., 2018 ). Hussain and Ahmed (2023) highlight the potential of artificial intelligence to bring about significant business improvements, with a particular focus on customer engagement and sales. Moreover, the literature suggests that while AI is already revolutionizing businesses, understanding its value and potential is paramount for companies looking to remain competitive (Bharadyanthe, 2023). Therefore, this research explores the role of AI in business, aiming to discover how it can be utilized to enhance customer engagement and boost sales.

This thesis is driven by the need for businesses to comprehend how artificial intelligence (AI) can bolster their competitiveness amidst rapidly changing market conditions. The aim of this thesis is to understand how artificial intelligence solutions can increase customer engagement and sales growth in business. This thesis contributes to a deeper understanding of AI's role in modern business practices. Through an in-depth understanding of AI's role in sales and customer engagement, the research aims to provide valuable insights when it comes to utilizing artificial intelligence to achieve competitive advantage and growth.

To achieve this, the study is guided by the following research questions:

- How can artificial intelligence solutions improve customer engagement?
- How can artificial intelligence be used to increase and develop a company's sales?

This thesis consists of 5 main chapters. The thesis begins with an introduction, where the purpose and importance of the research is brought out, as well as the research

questions and the structure of the work are presented. The second part of the thesis “Theoretical background” focuses on the theoretical framework of the research and examines previous literature, especially on the benefits and challenges of artificial intelligence in terms of customer engagement and sales promotion. At this stage, the aim is to delve into the theories and concepts related to the possibilities of artificial intelligence in business development. The third part of the study “Methodology” explains how the study was conducted, what methods were used to collect the data, and how the obtained data was analyzed. The case company will also be presented in more detail. The fourth part “Findings” presents the empirical results of the study. The last part examines the research results in more depth, go through the obtained results, analyze their theoretical meanings and their effects on business. At the same time, possible research limitations are also considered and guidelines for future research are presented.

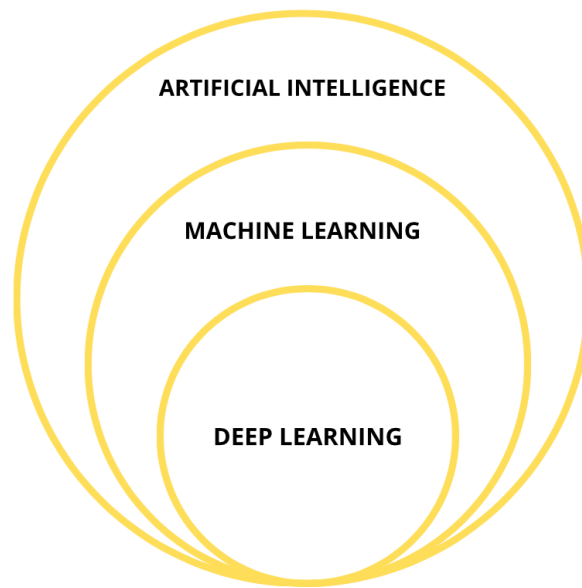


## 2 Theoretical background

### 2.1 Defining artificial intelligence

Sheikh et al. (2023) highlights artificial intelligence (AI) is a multifaceted and evolving field, often defined as a technology that enables machines to replicate a variety of intricate skills typically associated with human intelligence. However, this definition is somewhat vague, especially in pinpointing the exact nature of these skills (Sheikh et al., 2023). Nilsson (2019) offers a more precise definition, describing AI as a technology that operates effectively and proactively within its environment. This aligns with Sheikh et al. (2023) more open-ended definition, highlighting AI's capacity to adapt and evolve across diverse applications.

The challenge in defining AI stems from the numerous interpretations and confusion surrounding what AI truly encompasses (Gbadegeshin et al., 2021). While some researchers attempt to limit AI to specific functions, others include multiple attributes in its definition (Martinez, 2019). According to Buntak et al. (2023), the primary goal in developing AI systems is to mimic human cognitive processes and create decision-making alternatives. AI is not only about replacing human roles but also aids in decision-making and data analysis within organizations. It involves automated systems capable of advanced thinking and intelligent decision-making, enabling them to adapt their behavior according to environmental factors (Buntak et al., 2023).



**Figure 1** The difference of artificial intelligence, machine learning and deep learning (Srivastava et al., 2023)

Srivastava et al. (2023) highlight that AI comprises various technologies as Figure 1 demonstrates, including machine learning and deep learning, each serving distinct purposes and uses in the business world. Understanding these terms and the fundamental concepts they entail is crucial for comprehending the diverse business applications of AI (Srivastava et al., 2023).

Artificial intelligence pertains to a machine's capacity to utilize skills typically linked to human intelligence (Europarlament, 2020). AI is a branch of computer science that aims to simulate the processes of human intelligence, such as reasoning, learning and self-correction, with computer systems, this enables machines to perform complex tasks and make decisions that require intelligence (Srivastava et al., 2023).

*Machine learning* refers to how systems can automatically learn specific tasks from problem-specific training data. This learning makes it possible to build analytical models and solve tasks (Sharma et al., 2021). Machine learning is one of the application areas of artificial intelligence, which is based on the idea that systems can learn and develop

from the data they process. This allows systems to improve without constant manual programming in repetitive tasks (Janiesch et al., 2021).

*Deep learning* is a part of machine learning, deep learning is a sub-concept of machine learning that focuses on artificial neural networks (Janiesch et al., 2021). These neural networks mimic the functioning of the human brain and are able to learn complex patterns from large amounts of data. It focuses especially on building and training deep neural networks (Sharma et al., 2021). Its goal is to create systems that can learn and produce results independently without constant supervision (Srivastava et al., 2023).

## **2.2 Exploring AI's role in elevating customer engagement and sales**

Most often in all companies, the goal is to utilize artificial intelligence to grow the business, which includes *maximizing sales* and *improving customer engagement* and satisfaction. One of the most effective ways to keep customers involved and committed to the company and the products it offers is to strengthen customer relationships (Ahmed & Hussain, 2023). Studies indicate that AI can enhance customer satisfaction by providing more personalized solutions and by aiding human employees in delivering superior service compared to what they could achieve without technological assistance (Ahmed & Hussain, 2023). Burns et al., (2023) emphasize, that although the use of AI can reduce costs and improve efficiency, its greatest value comes from enriching customers' lives (Burns et al., 2023).

Burns et al., (2023) highlight several perspectives regarding customer engagement; Artificial intelligence makes it possible to offer an even more personalized experience to customers. With the help of AI, companies can strengthen customer relationships by, among other things, providing customer service staff with tools that help them understand customers better and offer them customized solutions. AI can help improve the efficiency of customer service, for example by anticipating customer needs and directing them to the right customer service representative. AI can be utilized to analyze

a customer's digital behavior and develop unique behavioral profiles that aid in understanding the customer's needs and preferences more clearly. AI can also assist in tracking customer satisfaction and identifying potential issues in the customer experience (Burns et al., 2023). Artificial intelligence can enhance customer engagement in various ways; for instance, chatbots and other AI solutions can deliver rapid and seamless customer service 24/7, allowing human resources to focus on more intricate tasks (Ahmed & Hussain, 2023). Artificial intelligence can transform customer experience and engagement by equipping companies with the means to deliver more personalized and pertinent experiences. (Ahmed & Hussain, 2023).

*Sales work* is an excellent target for efficiency with the help of artificial intelligence. Sales work involves a lot of administrative work, routine customer interactions and forecasting tasks that can be enhanced by AI (Sinha et al., 2023). In fact, AI is already changing the sales industry by providing tools that streamline sales processes and help sales teams focus on their core areas of expertise (Sinha et al., 2023). This technology is still new and developing rapidly, but its potential for increasing sales is significant (Sinha et al., 2023). Kleinings (2023) highlight that Automation and artificial intelligence significantly impact sales, increasing leads by over 50%, reducing call time by 60-70%, and lowering costs by 40-60%. Artificial intelligence is used in outbound email campaigns, demand forecasting, and lead prioritization Kleinings (202). According to Dickie et al., (2022) salespeople are struggling, with only 57% of them meeting their annual sales quotas. One of the problems is that buying processes are now evolving faster than the sales processes, and buyers have access different online options to research products well before they interact with a salesperson (Dickie et al., 2022). In addition, salespeople spend only 32% of their time on actual sales work, the rest is spent on non-productive tasks (Dickie et al., 2022).

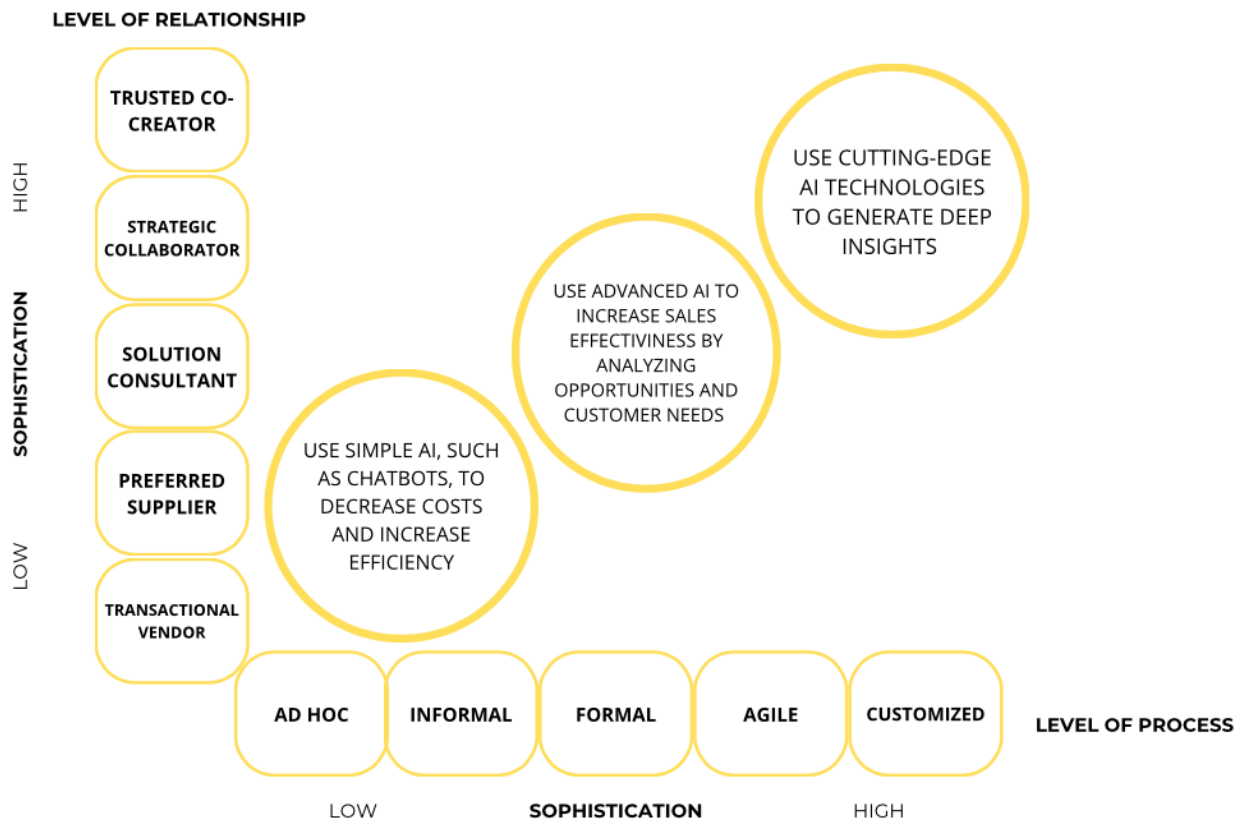
According to research by Gartner (2023), it's expected that by the year 2025, a significant 80% of interactions in B2B sales will incorporate digital channels and tools to increase productivity and improve the overall customer experience (Costello & LoDolce, 2023). Artificial intelligence plays a key role in increasing sales, as it helps identify potential

customers, prioritize sales opportunities, and make the sales process more efficient. Common applications of artificial intelligence to improve sales are machine learning and natural language processing. AI tools are especially valuable for analyzing large amounts of customer data and generating predictive reporting that helps the sales team focus on the most promising customers. In addition, chatbots and virtual assistants based on artificial intelligence can answer customer questions and offer product recommendations, which promotes successful sales (Ahmed & Hussain, 2023). Dickie et al., (2022) examine in their article the role of artificial intelligence in increasing sales and its practical applications. Although many companies have implemented advanced technologies in their sales processes, studies show that many do not use them effectively.



**Figure 2** How AI in sales is changing the selling process (Attarbashi, 2023)

AI is changing the sales process in many ways as figure 2 shows. Enhancing decision-making, improving the customer experience, and increasing the productivity of sales teams are listed as the biggest changes (Dickie et al., 2022). Attarbashi (2023) highlights that AI can help automate email communications and create tasks and reminders for sales team members, improving efficiency and helping them focus on the most important tasks. In addition, Attarbashi (2023) also listed the following benefits that AI can bring to sales: Lead scoring, price optimization, upselling and cross-selling, forecasting, customer improvement, practice improvement, managing for performance, easier prioritization, and reduce costs and time.



**Figure 3** Sales success matrix (Dickie et al., 2022)

Dickie et al., (2022) present in their article a Sales Success Matrix-tool, that helps companies determine what kind of AI solutions they are ready to execute. The Matrix has two axes: the relationship level and the process level. AI can be useful at all five levels of the customer relationship, but in different ways. For example, at the transactional salesperson level, AI can help to improve processes and reduce costs, while as a trusted partner, AI can enable deep collaboration with customers (Dickie et al., 2022).

However, the use of AI in sales is not without problems. AI can draw incorrect or biased conclusions and integrating it into sales processes can be expensive and require rare

expertise. Keys to effective utilization include integrating AI into existing sales systems, quickly generating value, and controlling costs. (Sinha et al., 2023)

### **2.2.1 The effect of customer engagement on sales**

Michael Fertik (2019) discusses the importance of customer engagement in business. Customer engagement means inspiring customers to participate in experiences created by the brand. This can lead to brand growth, customer loyalty, and consequently, an increase in sales and revenue (Fertik, 2019). Customer engagement benefits both buyers and suppliers by speeding up the completion of transactions and meeting current customer expectations. Customer engagement helps develop customer loyalty and gather valuable customer information (Briglia, 2020).

Several studies link customer engagement to increased sales. According to a study by Constellation Research (2020), Enhancing customer engagement has the potential to boost revenue from cross-selling by 22 percent, up-selling by 38 percent, and increase the size of orders by 5–85 percent (Constellation Research, 2020). Fertik (2019) mentioned in his article that, according to a report by Temkin Group, companies earning a billion dollars a year can increase their revenue by 775 million dollars over three years by investing in customer experience. Research by Reputation.com (2020) supports these results, showing a direct link between high customer engagement and revenue in various industries. It is important to remember that customer engagement cannot be forced; instead, the company must create opportunities for it and inspire customers to participate and purchase (Fertik, 2019).

### **2.2.2 Adapting to Rising Customer Expectations in the Digital Era**

AI empowers companies to create a more personalized user experience and reach a new level in marketing (Weitzman, 2022). The competition is intensifying, customer demands and power are increasing, and technology is taking over various aspects of life.

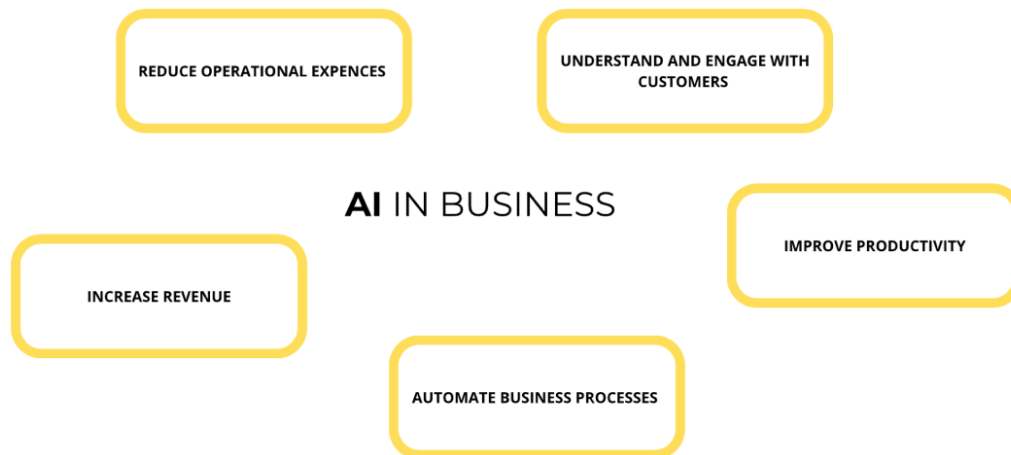
Companies are required to demonstrate clearer differentiation, more customer-oriented business practices, utilization of technology, and digital innovations. To keep up with development and meet changing customer needs, businesses must continuously develop their digital expertise. Digitalization is not just the digitization of old functions, but a window to entirely new business opportunities, enabling more efficient business operations, and the chance to create greater value for customers and their experiences. This phenomenon is also referred to as digital transformation, where business development is made possible by utilizing new digital technologies. Examples include social media, artificial intelligence, and analytics (Ritter & Pedersen, 2020).

Digital technology has changed people's buying habits. Mobile phones, apps, automation, machine learning and other technologies make it possible for customers to get what they want almost instantly (Jarman, 2021). Jarman (2021) highlights the importance of focusing on the growing expectations of customers in the digital age. As the digital landscape changes, companies must adapt their customer service strategies to meet constantly changing customer expectations, utilizing self-service and artificial intelligence, but at the same time ensure a seamless experience between different channels (Jarman, 2021). Briedis et al. (2020) and Jarman (2021) both point out that the corona pandemic has led to significant changes in consumer behavior. During the pandemic, customers have shifted to digital interactions even more, and their patience has decreased, companies must provide effortless experiences to meet these expectations (Briedis et al., 2020).

Companies should concentrate on creating AI solutions that not only improve customer engagement but also ensure high quality and accuracy in their interactions (Marr, 2021). Marr (2021) emphasizes how everything revolves around making customers' lives easier and solving their problems. Today, consumers expect smart solutions for many daily problems, tasks, and activities and for this, companies need the help of artificial intelligence (Marr, 2021). The goal is to offer customers even more personal experiences and more efficient service, which can increase customer satisfaction and loyalty (Ahmed & Hussain, 2023).



## 2.3 The Utilization of AI in Business

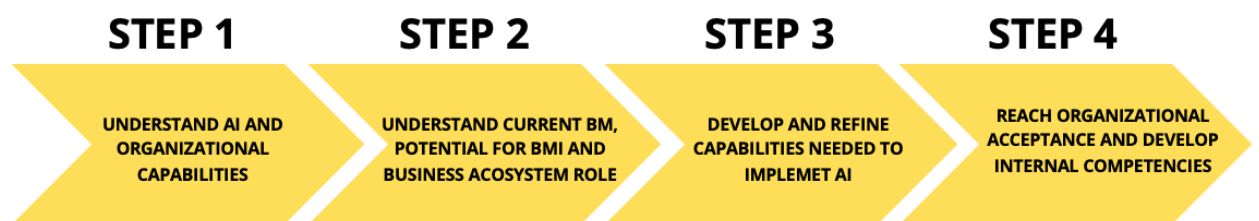


**Figure 4** AI possibilities in business

Marr (2021) emphasizes that artificial intelligence (AI) offers multiple opportunities to enhance the intelligence of business operations by opening doors to customization and optimization, enabling the creation of products and services that align more precisely with customer preferences. Achieving this often involves reevaluating existing business processes, such as streamlining manufacturing for greater efficiency in today's fiercely competitive market landscape (Marr, 2021). Jain states (2023) that artificial intelligence offers significant business benefits, focusing especially on increasing productivity and improving cost efficiency. It automates repetitive tasks, freeing up employees for more valuable tasks. In addition, it enables efficient processing of large data sets and improves data-driven decision-making, which enhances predictability and resource management (Jain, 2023). Prior research confirms the enormous potential of artificial intelligence to bring significant improvements to business through automation and intelligent data analysis (Jain, 2023). Marr (2021) underscores the crucial importance of identifying where AI can truly add value to company and determining the key areas of focus for your organization (Marr, 2021).

There are numerous different options for the business utilization of artificial intelligence. Principally, AI acts as a support system for business, which among other

things; automates, accelerates, and enhances thinking-intensive work stages, improves the quality and accuracy of products and customer service, enables the cost-effective implementation of entirely new business models, reduces errors made by humans, streamlines processes, and optimizes services, and thus reduces the costs associated with business while increasing revenue by identifying new sales opportunities. (Weitzman, 2022)



**Figure 5** Roadmap for AI business model implementation (Reim et al.,2020)

Reim et al. (2020) offers a four-step roadmap (figure 5) for the implementation of artificial intelligence: (1) understand AI and the digital transformation capabilities needed by the organization, (2) understand the current business model, its potential for innovation, and its role in the business ecosystem, (3) develop and refine capabilities for the implementation of AI, and (4) achieve organizational acceptance and develop internal competencies (Reim et al., 2020).



**Figure 6** Most common ways companies are using AI in 2023 (Cardillo, 2023)

As AI technology continues to develop, according to Cardillo (2023) companies are finding new ways to utilize it in their business. Currently, as seen in the figure 6, one of the most common uses is the use of artificial intelligence in customer service tasks. In fact, 56% of business owners use artificial intelligence to improve customer service (Cardillo,2023). In customer service, AI will for example automate repetitive tasks, allows humans to focus on the human side of customer service and builds a better customer service and experience (Morgan, 2023).

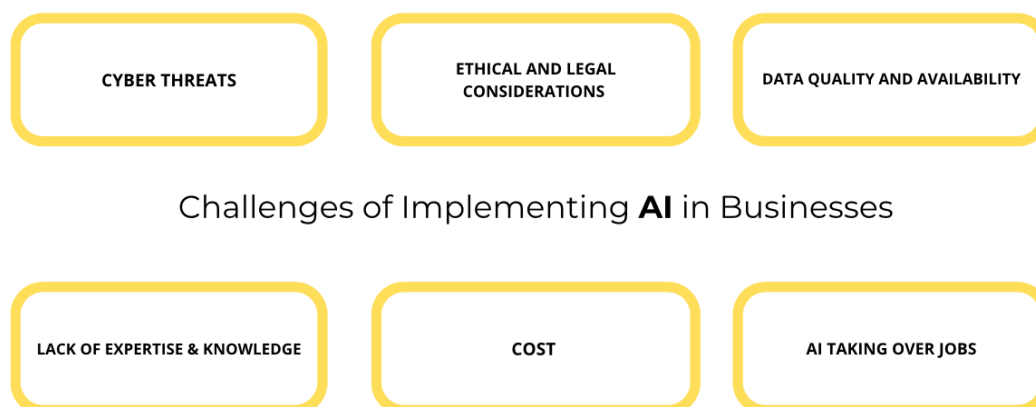
Artificial intelligence-assisted customer service assistants have become common in a wide variety of companies, promising time and money savings (Adam et al., 2020). By using artificial intelligence in customer service, companies can now better predict and understand their customers' wishes and needs. This means that they can fine-tune their service to meet user expectations more and more closely, which improves the customer experience. Chatbots have also helped to decongest call centers, freeing up customer service staff to focus on more complex cases and tasks, thus improving service quality

(Andrade & Tumelero, 2022). Chatbots are user-friendly and provide first-line support, acting as a fast and efficient operator available on a variety of customer-chosen communication channels. They are also able to filter and direct more demanding cases to the right employee (Andrade & Tumelero, 2022).

Cardillo (2023) illustrates in his research that about half of the companies who participated in the study, plan to integrate artificial intelligence into their processes during the current year. Especially in China, the adoption of artificial intelligence is at its highest, as about 58% of companies have already adopted it. Additionally, the global AI market is predicted to grow to \$1.85 trillion by 2030. Cardillo also brings up, that large companies are twice as likely to use artificial intelligence as small companies. (Cardillo, 2023)

## **2.4 Challenges in utilizing AI in business**

The rapid development and expanded use of artificial intelligence across various sectors bring significant societal impacts and unintended risks (Nalini, 2024). AI developers agree that the field needs to be regulated to manage these risks (Minkkinen & Mäntymäki, 2023). Although artificial intelligence offers many advantages for businesses, its implementation also presents numerous challenges for companies (Jain, 2023). Minkkinen and Mäntymäki (2023) emphasize the importance of distinguishing between the "easy" and "difficult" problems in AI governance. The easy problem focuses on how organizations can ensure their AI systems operate in accordance with societal laws, values, and norms, covering the management of data, algorithms, and algorithmic systems, as well as the socially responsible development of AI (Minkkinen & Mäntymäki, 2023). The difficult problem, on the other hand, relates to the broader societal impacts of AI, such as the future of democracy and work, and requires long-term examination and ongoing discussion to understand societal-technological changes (Minkkinen & Mäntymäki, 2023).



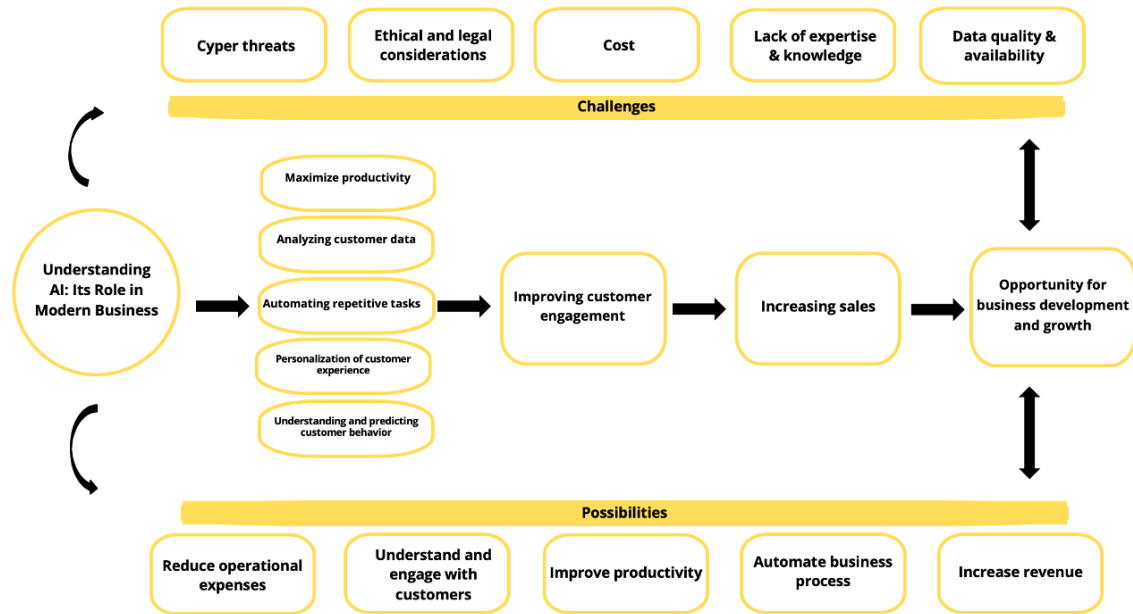
**Figure 7** Challenges of implementing AI in businesses

One of the most significant challenges is related to data protection and security. As companies collect and analyze more and more data, the risk of data breaches and cyber-attacks increases (Jain, 2023, p.2). The use of artificial intelligence can raise ethical questions, especially regarding how it is used in decision-making. There is a risk that AI could increase prejudice and discrimination unless its development and implementation are carefully monitored. Finally, the concern is also related to the possible displacement of jobs, as artificial intelligence can automate many traditional human labor tasks (Jain, 2023). For example, AI's growth in customer service brings up: Will AI replace human customer service jobs? (Morgan, 2023)

Durbin (2023) emphasizes the *cyber threats* brought by artificial intelligence, because cybercriminals have already started to use artificial intelligence. Advanced artificial intelligence-based attacks used by cybercriminals, such as phishing and deepfake techniques, can endanger companies' information security. Such attacks can lead to leakage of sensitive information, fraud, and reputational damage. There is also a lot of talk around the topic of data poisoning, which can lead to serious consequences. If artificial intelligence models are manipulated through poisoned data, companies' decision-making can be based on distorted information. This can lead to wrong business decisions and financial losses, the development and innovations of cybercrime are

continuous (Durbin, 2023). The use of artificial intelligence is also expected to endanger a large number of jobs (European Parliament, 2020). Although AI is expected to create new and better jobs, education will be crucial in preventing long-term unemployment and ensuring the workforce's skills remain current (European Parliament, 2020). It can be stated that the challenges associated with the use of artificial intelligence for businesses are diverse and require both immediate and long-term solutions, companies must consider the ethical and societal impacts of AI use and develop responsible practices for managing AI (Minkkinen & Mäntymäki, 2023).

## 2.5 Theoretical framework: AI-enhanced customer engagement and sales growth



**Figure 8** Theoretical framework

Looking at the role of artificial intelligence in today's business, the theoretical background has deepened into the challenges and opportunities that artificial intelligence brings, especially from the perspective of customer engagement and sales. Among these challenges, cyberthreats, ethical and legal considerations, cost factors, lack of expertise and problems with the quality and availability of information have been identified as critical obstacles that companies must overcome in order to take advantage of the opportunities offered by AI (Minkinen & Mäntymäki, 2023; Durbin, 2023). The possibilities of AI, such as improving operational efficiency, in-depth analysis of customer data and automating business processes, can lead to improved customer engagement and increased sales, which is the basis for business growth and development (Weitzman, 2022; Ahmed & Hussain, 2023).

The theoretical framework outlined in Figure 8 provides a direction for future research phases and emphasizes the need to deeply understand how AI solutions can increase

customer engagement and thus sales growth, which in turn promotes business growth. This framework presents a systematic view of how the different application fields of AI are linked in a positive cycle: through improved customer understanding and experience, sales results can be directly affected, which creates opportunities for company development and growth.



## **3 Methodology**

### **3.1 Research approach**

This master's thesis focuses on the role of artificial intelligence (AI) in business, especially its potential to improve customer engagement and sales growth. The chosen research methodology is a qualitative case study, selected for its capability to offer a comprehensive insight into the subject while addressing the "how" and "why" inquiries (Yin, 2009). Interviews, document analysis, and participant observation serve as the methods for data collection, with the analysis drawing from both theoretical and empirical evidence to interpret and comprehend the practical uses of AI. The research aims to answer questions about the use of AI in the promotion of customer engagement and sales, which helps companies to use AI to achieve competitive advantage and growth.

This study falls within the realm of qualitative research, as it focuses on the empirical collection and analysis of data, based on interviews and other qualitative materials. Qualitative research aims to understand and interpret the phenomena under study in depth, and it is inductive in nature, meaning the research starts from the data and seeks to form generalizations and theoretical views based on the collected data. (Moser and Korstjens, 2017)

The tradition of case studies is part of the qualitative research tradition and forms a special research strategy and approach. A case study is a widely used method in business economics when studying companies and organizational behavior (Rashid et al., 2019). A case study is often suitable as a research method in those cases where the research seeks answers to the "how" and "why" questions, the researcher does not influence the phenomena being studied, and the perspective of the research is in some current phenomenon connected to a real-life context (Yin, 2009). Sometimes the boundaries

between the broader context and the actual phenomenon under investigation may become blurred, in which case previous research and theory can be used to help guide the research process (Yin, 2009.). The subject of a case study can be one company or several comparable companies. Sometimes a smaller unit is also used as the object of the study, such as a department or a profit unit. One company is well suited as a research object if it can be considered to be a representative, unique, typical, critical or extreme example of the phenomenon under investigation (Yin, 2009).

Looking ahead mentioned criteria to the research questions and the method of execution of this thesis, it can be stated that the case study is excellently suitable as a method choice for this research. This suitability is further reinforced by the unique ability of case studies to provide a comprehensive view of phenomena, enabling a deep understanding of the underlying background factors. Specifically, the case study method facilitates a detailed examination of interactions, processes, and outcomes within a real-life context. Moreover, the adaptability of case studies to combine various data sources fits perfectly with the needs of this thesis, enabling a robust and multifaceted exploration of the topic.

The selected case company in this thesis is a notable example from the industry. The choice of the case company has been influenced by its significant presence in the housing market, its pioneering investment in digitalization and innovations, its commitment to improving the customer experience with the help of artificial intelligence, and its ability to maintain a competitive advantage. These aspects make it an exemplary subject for research on the impact of AI on business.

### **3.2 Data collection**

The data collection methods of this study are semi-structured interviews, document analysis and participant observation. Different ways of collecting data were used to get a lot of detailed information and to ensure rich data foundations and enable exploration (Yin, 2009). In addition to interviews, there were opportunity to analyze some reports, such as sales data, customer feedback, and other relevant documents to assess the impact of AI solutions. The research also allowed for observing the use of AI tools from an employee's perspective and identifying its potential and problems.

A semi-structured interview method was selected for the study, as it offers the opportunity to explore the opinions and ideas of the interviewees more deeply and to ask them for additional information and clarifications, especially when dealing with complex or sensitive topics (Naz et al., 2022). This enables a deeper understanding of the researched topic and gives the respondents the opportunity to present their own views more freely. Semi-structured interviews are particularly useful when the researcher's goal is to understand the respondents' experiences and views around certain themes.

In the study, a total of 10 interviews were conducted, all of them remain anonymous. The interviewees were selected based on their relevance and contribution to the topic under study to improve the quality and objectivity of the research. The selection considered all organizational levels, from managers to those working in customer service, to obtain a comprehensive view of the use of artificial intelligence and its impacts on business, customer experience, and sales. The roles of the interviewees in the case company are compiled in an appendix available at the end of the research

report. The interviewees are aged between 25-55 years and have been with the company for at least 2 years.

Interviewee	Role in the Organization	Interview Duration (hh:mm)
1	Manager/Supervisor	59:40
2	Manager/Supervisor	48:20
3	Manager/Supervisor	40:15
4	Manager/Supervisor	44:30
5	Manager/Supervisor	1:03:20
6	Sales/Customer Service	20:40
7	Sales/Customer Service	25:30
8	Sales/Customer Service	23:15
9	Sales/Customer Service	19:50
10	Sales/Customer Service	21:00

**Table 1** Interviewee's summary

The background of the candidates and their experience within the organization were also part of the selection criteria. The selection criteria for the interviewees also included their roles and experiences within the organization. Among the interviewees were individuals with particularly strong experience in the use of artificial intelligence in business, including those who had participated in AI projects or worked with AI tools. Interviewees were promised that their responses would be treated confidentially and that quotes would be used anonymously to ensure that individual respondents could not be identified. During the interviews, it was taken care to ensure that the discussion stayed on track and focused on essential information gathering related to my research questions, while avoiding diversion into tangential topics.

The questions are designed in a way that allows respondents to share their own experiences and views without the questions directing the answers too much. This

approach helps to obtain a diverse picture of the use of artificial intelligence and its impacts from various perspectives. By asking both management level and ground-level workers, who works with customers, you get a diverse picture of the use of artificial intelligence. This helps to understand how AI can be utilized in different areas of business, such as improving customer experience and enhancing sales. The information obtained from interviews enriches research by providing concrete examples of the current use of artificial intelligence and its perceived value in business. This supports research goal of deepening the understanding of AI's role in modern business practices.

The interview categories are divided into eight parts to gain a deep understanding of the use of artificial intelligence in the company and thoughts on its role in one's own work; Implementation and development of artificial intelligence, customer interaction and experience, sales and business growth, benefits and reception of the housing agent, challenges and solutions, competitive advantage and distinctions, customer data and analytics, and innovation and future plans. It can be stated that the interview questions are well suited to support the objectives and research questions of the research. They allow for a detailed and varied gathering of information about the use of artificial intelligence and its effects on business, customer experience, and sales, which supports the objectives of this research.

In addition to interviews, different data sources were used in this research to obtain a comprehensive understanding of the topic. Firstly, a 30-page summary document was obtained for the study from the case company, which contained valuable information on customer experience analyses, including data on customer behaviors, preferences, and needs, reflections on future AI solutions, and stages of creating and developing an AI application. Additionally, secondary sources were used in the study such as the organization's public strategy and official website, which provided background information and context for my research. With this versatile use of data, I aimed to ensure the reliability and comprehensive understanding of the research topic, as emphasized by Yin (2009).

### 3.3 Data analysis

The study utilized qualitative content analysis, which provided a profound understanding of the diversity and richness of the research material. The choice of qualitative content analysis was based on its flexible framework for organizing and interpreting data, particularly in handling complex customer experience analyses and artificial intelligence solutions (Forman & Damschroder, 2007).

There are many different ways to analyze qualitative data, but standardized techniques are few. In qualitative research, it is possible to make inductive, data-driven, or abductive theory-based conclusions (Hirsjärvi & Hurme 2008). This study positions itself between theory-driven and data-driven research. The data analysis does not directly rely on theory, but the examined themes are strongly built upon the foundation of previous empirical research. The analysis seeks to identify factors that are essential in explaining the use within the studied system, factors that previous empirical research has shown to influence the acceptance of technology and explain its use.

The analysis process progressed systematically through several stages. After thorough familiarization with the material, it was divided into analysis units, such as sentences or thoughts. Subsequently, a classification system was created through comparison and contrasting, and the data was coded according to the classification framework. The analysis process proceeded in cycles until no new classification categories were found, ensuring a thorough and systematic approach. Then, the responses to research questions were systematically compared to the theoretical framework presented.

To analyze the responses, the interviews were recorded and transcribed immediately after each interview. Considering the close connection between data collection and analysis, notes were also taken during the interviews. Key points of the interviews were

highlighted and organized into a list based on themes and job descriptions, facilitating comparison of the obtained information from the interviews.

### **3.4 The assessment of the quality of the data**

The reliability of the study focuses on the repeatability of results (Yin, 2009), and in this type of qualitative research, it depends on the transparency of the research process. According to Saunders et al. (2006), a detailed description of the research process ensures the study's repeatability, emphasizing the importance of the timing of interviews and potential biases from both interviewees and the interviewer. On the other hand, the validity of the study assesses whether the research method used accurately measures the phenomenon (Hirsjärvi et al., 2009), and in this research, consistent concepts were used to ensure that interview questions align with the research objectives. Reliability and validity, originally developed for the needs of quantitative research, are also applicable to qualitative research (Tuomi & Sarajärvi, 2009).

In qualitative research, the human-centered approach must be considered, as the researcher's value system may guide the research and full objectivity may not always be possible (Hirsjärvi et al., 2005). The researcher of this study works within the target organization, which has proven to be the most significant risk to the study's validity. The researcher's strong role within the target organization and extensive background knowledge of the subject poses risks to their objectivity. On the other hand, a deeper understanding of the subject allows the researcher to collect more relevant information for the study and to better consider important details during the data analysis phase. However, this may also affect the way the researcher views the research material according to their preconceptions, thereby weakening the validity of the results.

It should also be noted that the researcher works with the interviewees which also can strongly influence the researcher's objectivity. In this situation, there is a risk that the

close relationship between the researcher and the interviewees could influence the interviewee's experience of the interview situation. However, this could be assessed as a positive aspect, as the very confidential relationship has allowed the interviewees to be very open and honest during the interview. The threat to validity posed by the researcher's role has been minimized through the transcription of interviews. Each interview was transcribed verbatim, and the statements made by the interviewees have not been modified based on the researcher's personal opinions, experiences, or perspectives. Additionally, the researcher has paid special attention throughout the research process to ensure that their own experiences or opinions do not influence the research outcomes.

By maintaining these methodological considerations, the study aims to contribute a reliable and valid understanding of AI's role in sales and customer engagement.

### **3.5 The case company**

In this study, the case company is a residential investment company in Finland, known for its innovative approach in the competitive rental housing market. The company is dedicated to improve urban living by offering a variety of rental solutions.

The Finnish rental market is highly competitive, with a wide range of participants from small landlords to large investors. Despite this, this company stands out by focusing on providing its tenants with excellent living experiences and leveraging technology to meet customer expectations.

At the core of the company's offerings are its digital services, which enable a seamless and efficient process for finding and renting homes. These services are designed to simplify the rental experience, allowing customers to manage their housing needs online effortlessly. The company's platform enables potential tenants to browse housing



options, access detailed information, and complete necessary rental procedures electronically, reflecting a modern approach to housing.

By prioritizing customer convenience and adopting a digital-first strategy, the company aims to redefine rental living. Its efforts to integrate technology into every aspect of its operations highlight a broader ambition to stay at the forefront of the housing industry's digital transformation, ensuring it remains the primary choice for residents seeking quality and convenience in their living arrangements. All in all, Company aims to provide its residents with the best customer experience and stay ahead of competitors in digitalization, which is the reason why they have been chosen as part of this study.

## 4 Findings

### 4.1 The current state of artificial intelligence in the case company

The facts presented in the theory section show that although the potential of AI has been recognized, its full exploitation is still unrealized, with only a small portion of companies having widely adopted AI technology, as shown in case company. There is knowledge and understanding of the existence of AI and its possibilities are partially understood. However, AI still seems very distant to many, and it is not expected to take over for a long time. Ideas related to AI also differed a lot between managers and those working in the customer service. Even within these groups there were some differences in views. Interviewees 1-5 are supervisors and managers, interviewees 6-10 work in customer service and sales. At the beginning of the interview when discussing AI on a general level, the attitude towards AI was quite positive and hopeful:

*"I see a lot of potential and opportunities with AI in our industry and in our company. I'm eagerly anticipating how it will change my job description in the future."  
(Manager/Supervisor 2.)*

*"Thanks to artificial intelligence, our business will be significantly shaped in the future, but there is still a long way to go."  
(Manager/Supervisor 5.)*

*"AI will be very useful in our industry and it can be used to stand out from the market."  
(Manager/Supervisor 4.)*

The interview however also revealed that some still have very little knowledge and understanding of AI in general. The fear of AI taking everyone's jobs, which is also commonly talked about in the media, came up in the interview :

*"I don't fully understand the benefits of artificial intelligence and what it'll be capable of in the future." (Sales/Customer Service 7.)*

*"I find reforms like AI heavy and frustrating because the probability that everything would work right away is very unlikely." (Sales/Customer Service 10.)*

*"I'm trying very hard to get rid of the idea that AI is just going to take everyone's jobs, but so far my thoughts about AI aren't very positive." (Manager/Supervisor 3.)*

The observations show that although the potential of AI is widely recognized, its full understanding and especially its utilization has yet to be realized. This reflects the general trend also discussed in the theory section, where recognition of potential does not yet mean readiness or ability to implement it. According to the observations, there is also an understanding that AI can help companies understand customers better and offer them individualized services. However, it was positive to note the optimistic attitude of the companies' managers towards the potential of AI. Although the benefits of AI are recognized, its implementation is still challenging for many companies. The observations confirm the view that there are several challenges associated with the use of AI.

#### **4.1.2 The use of artificial intelligence in daily work**

The understanding of the possibilities of AI was also well visible when discussing its use in one's work. There is information about it on how it could benefit one's work, but it has not yet been put into practice. Based on the interview, there is not much AI in one's daily use, and it is not used to make one's work more efficient, even with all the opportunities.

*"Although I know that AI can handle all my work and completely replace me, I don't use it in my work at all. I could already partially use it as a help, but I don't want to."* (Sales/Customer Service 10.)

*"I feel that AI could soon replace me and my work completely. I feel that quality control still needs real individuals for a long time to come."* (Sales/Customer Service 6.)

*"I consider that AI cannot replace me as an employee. It can operate as a tool and speed up processes while making them more efficient, but sales without a human will not happen yet for a while."* (Sales/Customer Service 7.)

*"Especially in this industry when talking about people's homes, I don't believe anyone is ready to buy or rent a home from a robot just yet."* (Sales/Customer Service 8.)

When discussing the use of AI, the conversation often became a bit uncertain and a little fear and doubt towards AI were also clearly noticeable. However, it is completely understandable, because AI is a large and difficult concept that is constantly evolving, as mentioned in the theory section. Among the managers, however, some had a significantly more positive and open view of AI, which also certainly facilitates its integration into the company and own operations:

*"I would hope that AI would be thought of as a new facilitating and enhancing tool, and not as something that takes away work and destroys everything that was built and functional before."* (Manager/Supervisor 5.)

Although AI is recognized as a powerful tool, its utilization in the workplace is just in the beginning. Based on the interviews, it appeared that employee's understanding of the practical applications of AI is still limited. Even though some see the possibilities of AI as an enhancer of work processes and revolutionizing the future work environment, others approach it with reservation or even fear, doubting its impact on workplace safety. This two-way attitude, on the other hand recognized potential and on the other the

hesitancy to realize it, reveals the internal contradiction of work communities in relation to AI. The need for more in-depth training and concrete examples of the successful application of AI is clearly identifiable in order to dispel uncertainty and promote technology integration. Leaders who are more positive about AI can be instrumental in promoting its understanding and acceptance within the organization, changing the perception of AI from a job-killing threat to a productivity-enhancing asset.

#### **4.1.1 Comparison of Supervisors' and Employees' views**

Differences of opinion on the use of AI and its effects on work are clearly visible between managers and employees. Managers see the possibilities of AI more broadly, while employees are more cautious and partly skeptical. All interviewees however see the future benefit of AI in the field. However, only a part of them uses AI in some way in their daily life, and some of those who work in the customer service do not see AI benefitting their role. The current role of AI in the company is small but it has already been utilized to some extent. This is more visible in the thoughts and views of the managers because those working in the customer service feel that AI is currently not being utilized in the company.

*"I see a lot of potential and opportunities for AI in our industry and our company, but I'm not looking forward to its arrival and implementation." (Sales/Customer Service 8.)*

*"Our business will still be significantly shaped in the future thanks to AI, and there are lots of ideas already." ( Manager/Supervisor 2.)*

Interviewee	I see potential in AI in our industry	I feel that AI is being utilized to our company's advantage	I you use AI in my work	I see potential in AI in my job role
Manager/supervisor	YES	NO	NO	YES
Manager/supervisor	YES	NO	NO	YES
Manager/supervisor	YES	LITTLE	NO	YES
Manager/supervisor	YES	LITTLE	YES	YES
Manager/supervisor	YES	LITTLE	YES	YES
Sales/Customer Service	YES	LITTLE	YES	YES
Sales/Customer Service	YES	NO	NO	YES
Sales/Customer Service	YES	NO	NO	NO
Sales/Customer Service	YES	NO	NO	NO
Sales/Customer Service	YES	NO	NO	NO

**Table 2** Comparison of Managers' and Employees' Perspectives Regarding Artificial Intelligence in Their Work and Organization

The difference can be seen in the views of the supervisors (interviewees 1-5) and those working in the customer service (interviewees 6-10) at the question level from the table 2 above. It can be seen from the chart that all the interviewees see the potential of AI in the field of the case company. Only a part of the management level people feel that AI is already being used as a company's competitive advantage. Only one individual of those working in the customer service uses AI in their daily work and on the manager level two out of five. It can be interpreted from this that the use of AI as an assistance to daily work is still very little in the case company. All managers and two salespeople/customer service representatives however see the possibility of AI making their work more efficient. Also, from the appendix 2, which introduces the roles and the times of the interviews, you can see from the length of the interviews that even though the same topics were discussed, the management-level employees had significantly more understanding, thoughts, and information related to the topic.

The differences between managers and those working in the customer service highlight the need for increased awareness and education about the possibilities and applications of AI. By developing internal training programs and workshops that focus on the utilization of AI in different departments, it is possible to increase awareness and reduce

fear about the effects of AI. Among other things, chatbot is already in use in several companies. The case company does not have a chatbot in use, even if the need for it is seen and felt to reduce the burden of customer service. In connection with the interviews, good points were also raised as to why AI would be a better customer server than a human. Wilder thoughts and ideas regarding the future were also thrown into the open.

## **4.2 Improving the customer experience with the help of artificial intelligence**

It is mentioned in the theory section that customer service will be one of the first business functions from which the conquest of AI can begin. For example, chatbot is already in use in several companies. Case company does not have a chatbot in use, even if the need for it is seen and it is perceived to reduce the burden of customer service. In connection with the interviews, good points were also raised as to why artificial intelligence would be better than a human as a customer server, and wilder thoughts and ideas regarding the future were also thrown into the open.

*"With the help of AI, I feel that we would get an even better and more customized service for our premium customers." (Manager/Supervisor 4.)*

*"Our customer service receives a lot of messages regarding to same topics, which AI would surely learn to answer very quickly." (Manager/Supervisor 3.)*

*"I feel that AI could be more polite as a customer server in some places. There would be no typos, the customer could be served in more languages and mistakes would be reduced. It is also said that AI has no emotions, so that aspect of customer service would be completely removed. Could AI-based customer service agents develop different personalities that resemble actual human beings? Or if the matter is taken far, could AI sometimes analyze/recognize based on the customer's voice alone who it is and react to*

*it, for example, if it notices that the customer was excited based on the voice when a detail of an apartment was mentioned, such as a walk-in wardrobe.” (Sales/Customer Service6.)*

Improving the customer experience with the help of AI, the role of the salesperson also emerged, whose actions have a great impact on customer satisfaction. The salesperson’s large to-do list and forgetfulness can have a major effect on the customer’s satisfaction:

*“Our salespeople have a lot to remember and continuous lists in their heads, which inevitably leads to forgetfulness. However, this forgetfulness has a significant effect on customer satisfaction. Could AI help the salesperson here and act as a constant reminder, so that the agreed schedules, such as after a promise of “I will send the contract in the afternoon on 3/28” would come as a reminder to the seller to remember that this has been agreed to and suggest sending the contract.”*

AI could also be used as a tool to know how to serve customers better and at once, in addition to the fact that it could analyze data, according to interviewee 3:

*“It would be interesting to use AI to track those contacts who always come back, i.e. do not receive the necessary messages and instructions from our end, so that we can learn to inform everything at once. Every message to our customer service burdens it, and if we could make the customer satisfied at once, it would considerably.”*

Improving the customer experience with the help of AI has been identified as a significant opportunity, but its implementation still requires development work. Automation and personalization of customer service are key application areas of AI.

*“Customers expect personalized and customized offers, and this should also be reflected in our customer service and the online store when the customer does business, AI*



*application on our website is already a step in the right direction. ” (Manager/Supervisor 5.)*

However, in the interview, several people pointed out that is good to remember to respect the customer. Not all customers want to work with a robot or artificial intelligence, but value human contact. Therefore, this option should not be completely removed:

*“A good response time combined with sufficient answers, creates customer satisfaction, especially in customer service. Respecting the customer is also reflected in the fact that we offer different ways to communicate with us, such as keeping the possibility of talking to a person for as long as possible, no matter how the world develops.” (Manager/Supervisor 4.)*

Improving customer service and offering a more personalized experience to customers with the help of AI are key themes that are brought up in connection with the utilization of AI. The interviews reveal that although there is a clear understanding of the potential of AI in customer service, its full implementation is still under development. The views of the staff differ on the role of AI in customer service: some see it as an opportunity to offer better and more individualized customer service, while others emphasize the importance of human contact.

In some of the interviews came up that AI could improve customer service, for example by reducing errors, offering multilingual service, and managing large numbers of customers efficiently. This could free up customer service staff for more complex and valuable tasks, such as deepening customer relationships. On the other hand, the personalization of AI applications and consideration of the customer’s feelings are areas that still require development.

### 4.3 Enhancing Sales and Business Growth Through Artificial Intelligence

Currently, AI doesn't have a big impact on the case company's business and sales yet, but the first steps have already been taken and there are already plans for the future. Opportunities were seen for business development with AI, but it was experienced in sales that AI can at most be an assisting and enhancing factor. Good points were raised about whether AI could replace a salesperson:

*"I feel that AI cannot replace sales, but with the help of it, sales could certainly be enhanced and increased enormously. We do a lot of work that is unrelated to making deals or potential customers. Of course, I understand that the sale also includes its accessories." (Manager/Supervisor 2.)*

Innovative solutions were also seen, not so much to replace the salesperson, but to help them. In the conversation, we talked about a sales assistant who could take care of the salesperson's checklist and prepare things for him. Tools with which AI could improve sales and time use also came up:

*"In sales itself, there will not be a big AI revolution yet, but artificial intelligence functioning as a sales assistant would be a big help. Reminding about unfinished business, making notes about agreed matters with the customer, gathering information about e-mail conversations, and reminding the seller if, for example, it has been agreed to be in touch at a certain time. Not to mention the optimization of the calendar with the help of AI. Sales would increase and above all, it would be more effective if our calendars could suggest when a colleague is at the destination or what the best time frame is to schedule apartment displays for maximized efficiency in a short time." (Manager/Supervisor 4.)*

Especially at the management level, they also knew how to justify and see why AI should be included in operations, as well as integrated into websites. The interviewees who

influence the case company's business emphasize that people's expectations for technology and digital services are growing continuously. You must keep up with its development if you want to remain competitive in the market.

*"The reason why AI is needed for the online store and our other operations is that customers need more personalized experiences." (Manager/Supervisor 5.)*

*"Currently, technology quickly learns what is important to the customer and offers them things in line with their values and preferences. The data collected from the customer is primarily used to produce value but also making it easier to find their wants and needs, and what the customer is looking for. It is generally noticed that the customer is frustrated if the data is only used for "pointless marketing"". (Manager/Supervisor 2.)*

*"The development of website personalization produces good results and increases customer experience for the better, so it is worth investing in it in the future as well." (Manager/Supervisor 5.)*

AI is mainly seen as an enhancer of sales processes that can help salespeople focus more on sales work instead of routine tasks. This view highlights the role of AI in analyzing data and improving the customer experience, for example through customized offers, but also its limitations as a substitute for human interaction. The company's management recognizes the growing expectations brought by the development of technology and sees that in order to remain competitive in the market, it is important to apply AI to improve customer experience and identifying new sales opportunities.

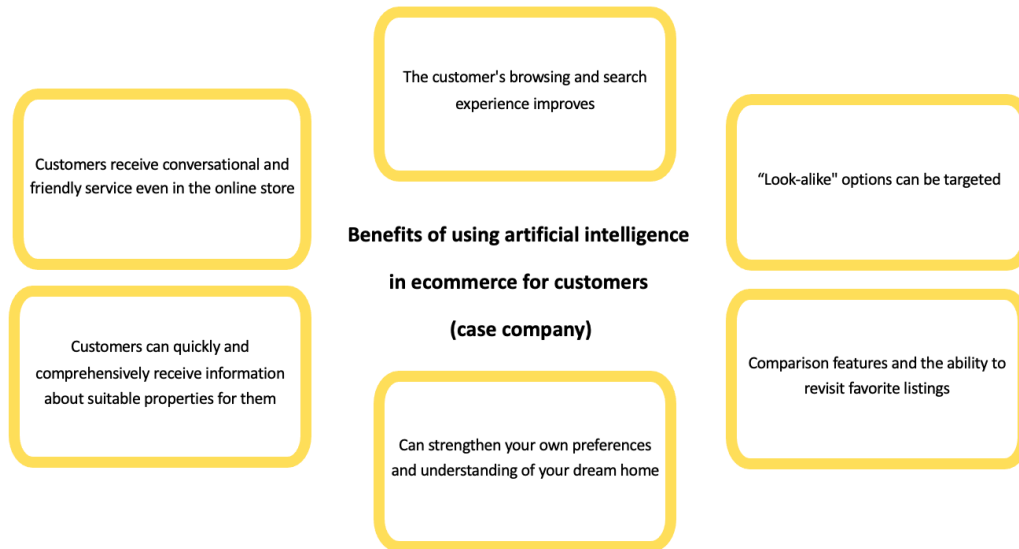
The company's strategy emphasizes the need in finding a balance between technological development and human service. Customers are increasingly valuing personal service, and the application of AI must support this need – not only by automating services, but also by enabling a deeper understanding of customer needs. With the introduction of AI, it is possible to free up salespeople's time to focus on more meaningful customer encounters and thus strengthen customer relationships.

Therefore, although the full utilization of AI still requires time and development work, its potential as an enhancer of customer experience and sales has been clearly identified.

#### **4.3.1 The effects of an AI-based application**

The case company has already created an AI-based application on its website, which is still in its early stage, but is already producing results. The goal of the AI application is to engage, increase the service experience and stand out from the competition. The application was built so that the case company could identify users based on their consent and thus collect even richer data. Since the publication of the application, the number of contracts has increased, and more contracts are concluded compared to last year, show the statistics of the case company, which are not allowed to be published in the study. This proves that AI can really enhance sales and develop business. The AI application also promotes business, as it can highlight apartments that the customer might not otherwise find on the site.

*"The AI application helps the customer in finding interesting apartments easier and faster based on the customer's preferences. We have noticed that well-done personalization increases conversions and user loyalty. Users who are blinded by information overload can be made to stop and return to content only relevant to themselves." (Manager/Supervisor 2.)*

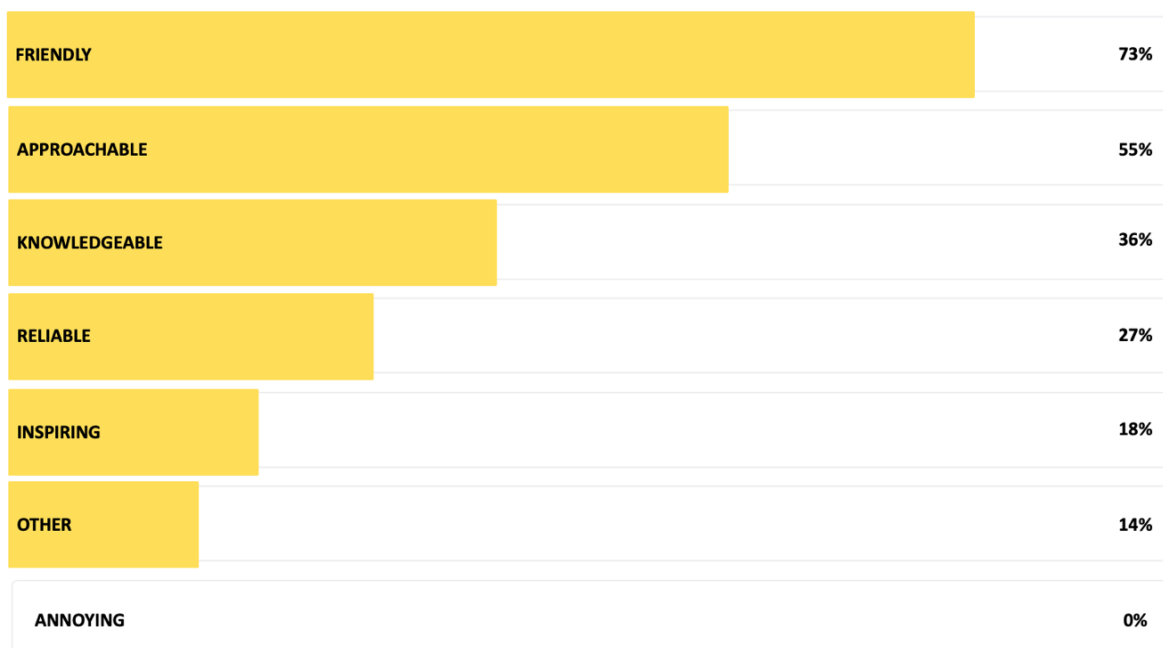


**Figure 9** Benefits for the case company of using artificial intelligence in ecommerce for customers

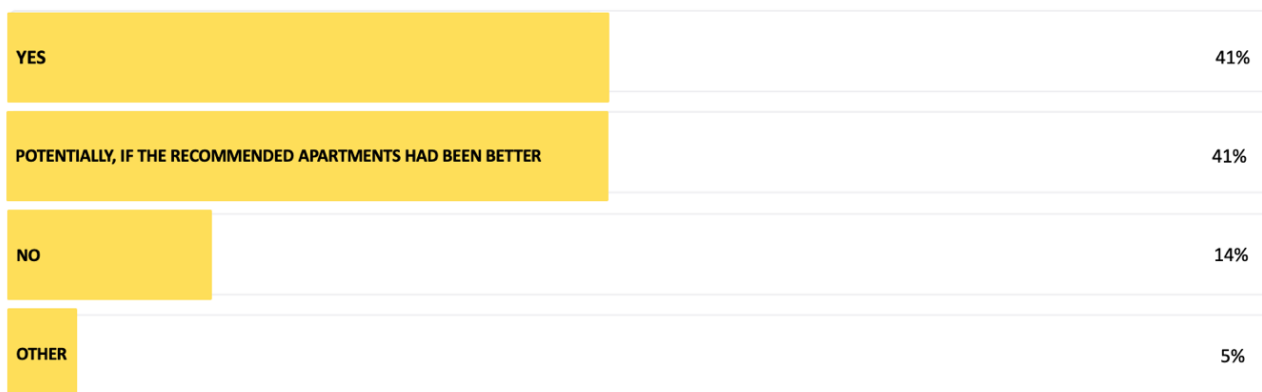
Interviewee 2. mentioned in the interview that according to research, which further encouraged them to start developing the application, they were told that if the user does not find content of interest on the site, their visit time remains under three minutes and in the worst case scenario, under five seconds. Those online stores that succeed in personalization are today's and future's success stories. Figure 9 shows the advantages that the use of AI in the online store can bring, as highlighted in the interview.

*"The application was also developed so that the customer would feel that the data collected about them is used to produce value – making it easier to find what I need and what I want." (Manager/Supervisor 5.)*

*"When working online, the majority of people accept a personalized approach, expecting it and preferring personalized sites." (Manager/Supervisor 2.)*



**Table 3** User's opinions after using artificial intelligence application (according to case company statistics)



**Table 4** Customers experiences on whether using AI tool was helpful in finding a new home (according to case company statistics)

According to the case company statistics, as can be seen in the tables 4 and 5, users' reception of the case company's AI application has been largely positive, and many felt that they could find an apartment/receive assistance in finding a suitable apartment using it. However, the AI application is still only used by a few customers or is only in the awareness of few employees. The application still also needs to be developed a lot for it to generate more profit for the company and more value to the customer.

*"We are constantly trying to figure out how to further develop the application, and the development list is already long with many ideas. Currently we can monitor how the application is used, how many apartments are clicked and deleted by its recommendations, and thus to understand what kind of apartments the customer does not like." (Manager/Supervisor 5.)*

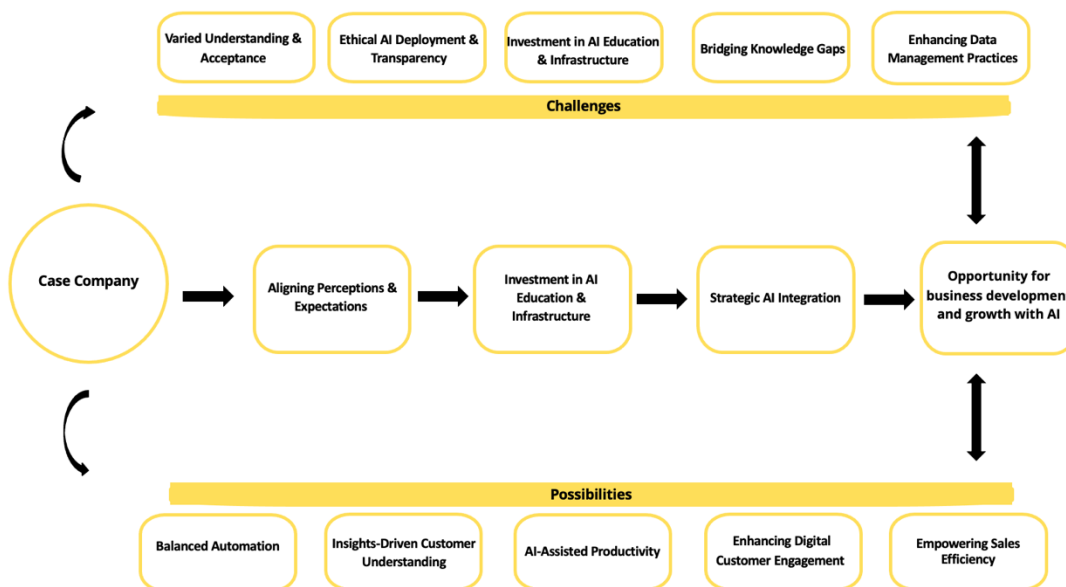
The case company's experience in introducing an AI application and the benefits it brings highlights the possible potential of AI in the development of business and customer experience. The initial stages of the development on the AI application have already shown concrete results, such as an increase in the number of contracts (according to case company statistics), which underlines the role of AI as a catalyst for sales and business growth. In particular, the enrichment of customer data and personalized service seem to increase customer engagement and loyalty, which in turn improves conversions and service experience.

However, the development of an AI application is not only a technological leap, but also a strategic choice that requires continuous investment and development work. The application's ability to offer customers the exact content that meets their needs, and possibly even proactively identify their wishes, sets the company apart from its competitors. This approach emphasizes the importance of personal service and customer focus in the digital world, where personalized experiences are valuable.

The challenges facing the company, such as the wider adoption of the application and the full utilization of its potential, require continuous innovation and a deep understanding of the user experience. Active utilization of customer and employee feedback in the development work is essential to ensure that the AI application meets real needs and brings added value to both the case company and its customers.

#### 4.4 Summary of the findings and the revised framework

The findings of the study reveal that the potential of artificial intelligence is recognized in the company, but its implementation and utilization are still in the early stages. There are noticeable differences between the different organizational levels regarding the use and understanding of artificial intelligence: managers see significant opportunities in artificial intelligence for business development, while those working in customer service and sales are more cautious and partly uncertain about the benefits that artificial intelligence brings in their own work.



**Figure 10** Empirical framework



The empirical framework (Figure 10) presents the perceived challenges and opportunities that the case company faces in utilizing artificial intelligence. Variability in understanding and acceptance, ethical issues in the use of artificial intelligence, investment in education and infrastructure, overcoming knowledge gaps and improving data management practices are seen as challenges. Against these are set opportunities that include balanced automation, data-driven customer understanding, artificial intelligence-assisted productivity, enhancing digital customer interaction and improving sales efficiency. In this context, the opportunity offered for business development and growth with the help of artificial intelligence is linked to these opportunities and challenges.

The artificial intelligence application has already produced results and increased the number of contracts, which speaks for the "Strategic AI Integration" and "Opportunity for business development and growth with AI" phases. However, the observation that the use of an artificial intelligence application is still unknown to few suggests that there is still work to be done to increase and share knowledge and understanding, which describes the challenge of "Bridging Knowledge Gaps"

On the possibility side, it can be concluded from the text that with the help of artificial intelligence, "Balanced Automation" and "AI-Assisted Productivity" can be achieved in practice. For example, when managers see AI assisting with reminders and time management, this suggests a balance of automation and productivity provided by AI. Additionally, "Empowering Sales Efficiency" aligns with the observation that AI could help salespeople focus on essential work.

Finally, "Opportunity for business development and growth with AI" summarizes the view that the integration of artificial intelligence offers new opportunities for business growth. This potential can be seen in the company's already made consumer AI

application, which has already produced results and increased the number of contracts. However, the application still needs to be widely adopted and developed so that it can generate greater results and added value for customers.

## 5 Discussion

### 5.1 Theoretical contribution

This thesis and its results deepen the understanding of the role of artificial intelligence (AI) in today's business. Considering the thoughts of the case companies about the use of artificial intelligence, the perceptions support previous views on the possibilities of artificial intelligence and bring new perspectives to practical application. The theoretical part of the study examines in depth the role of artificial intelligence in modern business, especially its ability to improve customer experience and support sales growth.

Theory and practice show similarities in many areas. For example, a report by McKinsey & Company (2023) shows that only 8% of companies have widely adopted artificial intelligence, which is reflected in the empirical findings of the case company. Although the potential of artificial intelligence in this company is recognized, its use is still in its early stages. This reflects a broader trend where theoretical potential has yet to be fully realized in broad practical application (Bharadyanthe, 2023; Jain, 2023).

Previous research, such as Marr (2021) and Jain (2023) have highlighted the possibilities of AI in enhancing business and improving customer experience. Particularly the introduction of AI-based application in the case company has already produced favorable outcomes in improving customer experience and enhancing sales. It shows in practice how AI can act as an accelerator of business growth.

In theory, the personalization of customer experience is AI's key benefit but based on empirical findings companies still need to work on how this personalization is balanced with customers' individual needs and wishes of customers. The theory suggests that AI can increase the performance of customer engagement, but it has appeared in practice that the deepening of customer engagement requires strategic integration and clear alignment with the company's business model.

The theoretical framework highlights external concerns like cyber threats and ethical issues, while the empirical findings bring to light internal challenges for the first time, including varying levels of understanding and acceptance of AI within an organization. Moreover, the study shows that embracing AI successfully demands substantial changes in a company's internal training and overall culture. This corresponds to Reim et al. (2020) presented a four-step roadmap for the implementation of AI, emphasizing that in addition to technological preparedness, know-how, understanding, and training are needed.

The research strengthens and deepens the view presented by Sheikh et al. (2023) about the continuous evolution and diversity of AI. According to the research, AI presents theoretically promising possibilities for the development of business, the practical execution depends on the strengthening of the company's internal readiness. Companies must consider the expectations of all stakeholders, particularly employees and customers. In order to maximize the use of artificial intelligence in business, the company must be ready to invest not only in technology but also in people and processes.

## **5.2 Managerial implications**

This thesis highlights the potential of artificial intelligence in business development and thus also emphasizes the need for managers to carefully plan its possible integration into the organization's operations. The findings of the study give business managers practical suggestions for seamlessly integrating artificial intelligence into their own operations, which, among other things, improves the customer experience and increases sales. The use of artificial intelligence enables highly individual and efficient interaction with customers whenever necessary. The successes of the case company with the artificial intelligence application described in section 4.3.1, illustrate how

personal customer engagement with the help of artificial intelligence can increase satisfaction and the number of contracts. Managers should know how to utilize the data brought by artificial intelligence to offer customized services and products that meet the increased expectations of digital environments.

The role of artificial intelligence in the development of sales processes is important. It automates routine tasks, accelerates, and improves the analysis of customer data, and improves relationship management, allowing sales teams to focus only on what matters. Research shows that artificial intelligence can act as an invaluable sales assistant, remind salespeople of critical tasks, optimize schedules, and identify new sales opportunities. Managers need to identify and leverage these advantages to improve their sales strategies and overall business growth.

In addition, leaders must ensure that the potential implementation of AI respects privacy, data security, and fairness to increase stakeholder trust and acceptance. Concerns about the effects of artificial intelligence on employment and possible biases that emerged in the case company interviews require clear guidelines that address these ethical aspects and promote employee well-being.

### **5.3 Limitations**

Although the study produced many positive insights, it is good to recognize its limitations, which affect the generalizability and reliability of the results of this study. Firstly, the research material was based on only one case company and interviews with 10 people, which immediately limits generalizability. Yin (2009) emphasizes that the depth of the case study in a special way provides knowledge and especially understanding of the subject, but at the same time it limits the wider application of the results. Secondly, as mentioned in the theory section, artificial intelligence as a term is developing very quickly, and the application of artificial intelligence and their effects on

business are constantly developing, which is why it would be important to constantly conduct research on the subject.

Thirdly, it is good to consider that the views of the interviewees may reflect subjective experiences and attitudes, which may also affect the objectivity of the results. Saunders et al. (2006) mention that the researcher's subjectivity and interaction with the interviewees can affect the interpretation of the results, and in this case the interviewee also worked as an employee in the case company. Using quantitative methods in addition to qualitative methods in further studies would be useful to strengthen the reliability of the results.

#### **5.4 Suggestions for future research**

This research has produced information and understanding of the current state of artificial intelligence and possible futures from the perspective of enhancing customer experience and sales. However, the scope of the research is limited only to the industry and company of the regulations and thus still more information and understanding would be gained in a larger size and research to cover different industries and marketing. Among other things, this would enable a more comprehensive understanding of the various effects of artificial intelligence in the corporate world.

In future research, it could be valuable also to view AI's long-term effects on business, customer experience, and sales. The focus of the customer experience also offered a new research perspective on how to implement artificial intelligence development in a much more customer-oriented way. There would definitely also be a place for further research to understand the ethical and social implications. It is important to continue the responsible use of artificial intelligence and minimize its negative effects, such as the loss of jobs and privacy security.

Artificial intelligence itself could be approached from many different perspectives, so that its broader understanding can also be understood in the corporate world. Current theories offer many ways to define artificial intelligence and its subcategories, such as machine learning and deep learning. Future research could deepen understanding of the differences and connections between these definitions.

## 6 References

- Aaltio Iiris. (2014). *Iiris Aaltio: Case-tutkimus metodisena lähestymistapana*. METODIX. <https://metodix.fi/2014/05/19/aaltio-marjosola-casetutkimus/>
- Adam, M., Wessel, M., & Benlian, A. (2020). AI-based chatbots in customer service and their effects on user compliance. *Electronic Markets*, 31(2). Springer. <https://doi.org/10.1007/s12525-020-00414-7>
- Ahmed, T., & Hussain, B. (2023). The Role of AI in Enhancing Customer Experience and Engagement in Digital Transformation. [https://www.researchgate.net/publication/371205771\\_The\\_Role\\_of\\_AI\\_in\\_Enhancing\\_Customer\\_Experience\\_and\\_Engagement\\_in\\_Digital\\_Transformation](https://www.researchgate.net/publication/371205771_The_Role_of_AI_in_Enhancing_Customer_Experience_and_Engagement_in_Digital_Transformation)
- Andrade, I. M. D., & Tumelero, C. (2022). Increasing customer service efficiency through artificial intelligence chatbot. *Revista de Gestão*, 29(3). Emerald. <https://doi.org/10.1108/rege-07-2021-0120>
- Attarbashi, B. (2023, October 8). *How Artificial Intelligence in Sales is Changing the Selling Process*. Wwww.ai-Bees.io. <https://www.ai-bees.io/post/how-artificial-intelligence-in-sales-is-changing-the-selling-process>
- Bharadiya, J. (2023). The Impact of Artificial Intelligence on Business Processes. *European Journal of Technology*, 7(2), 15–25. <https://doi.org/10.47672/ejt.1488>
- Bharadiya, J. P. (2022). Driving Business Growth with Artificial Intelligence and Business Intelligence. *INTERNATIONAL JOURNAL of COMPUTER SCIENCE and TECHNOLOGY*, 6(4), 28–44. <http://www.ijcst.com.pk/IJCST/article/view/232>



Briglia, C. (2020). *Why customer engagement is important*. Gartner. <https://www.gartner.com/en/digital-markets/insights/why-customer-engagement-is-important>

Bughin, J., Seong, J., Manyika, J., Chui, M., & Joshi, R. (2018). *NOTES FROM THE AI FRONTIER MODELING THE IMPACT OF AI ON THE WORLD ECONOMY*. <https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Artificial%20Intelligence/Notes%20from%20the%20frontier%20Modeling%20the%20impact%20of%20AI%20on%20the%20world%20economy/MGI-Notes-from-the-AI-frontier-Modeling-the-impact-of-AI-on-the-world-economy-September-2018.ashx>

Burns, M., Sankar-King, S., Dell'Orto, P., & Roma, E. (2023, August 1). *Using AI to Build Stronger Connections with Customers*. Harvard Business Review. <https://hbr.org/2023/08/using-ai-to-build-stronger-connections-with-customers>

Briedis, H., Kronschnabl, A., Rodriguez, A., & Ungerman, K. (2020). *Adapting to the next normal in retail: The customer experience imperative*. <http://dln.jaipuria.ac.in:8080/jspui/bitstream/123456789/1510/1/Adapting-to-the-next-normal-in-retail-the-customer-experience-imperative.pdf>

Cardillo, A. (2023). *How Many Companies Use AI? (New Data)*. Exploding Topics. <https://explodingtopics.com/blog/companies-using-ai>

Costello, K., & LoDolce, M. (2023). *Gartner Identifies Top Sales Technologies to Boost Buyer Engagement*. Gartner. Retrieved November 8, 2023, from <https://www.gartner.com/en/newsroom/press-releases/2023-05-16-gartner-identifies-top-sales-technologies-to-boost-buyer-engagement>

- Daqar, M. A. M. A., & Smoudy, A. K. A. (2019). The Role of Artificial Intelligence on Enhancing Customer Experience. *International Review of Management and Marketing*, 9(4), 22–31. <https://www.econjournals.com/index.php/irmm/article/view/8166>
- Dorfman, A. (2020). *2020 Retail Reputation Report*. Reputation. <https://reputation.com/resources/reports-research/retail-reputation-report/>
- Durbin, S. (2023, March 25). *Council Post: Four Risks And Challenges Of AI Democratization For Businesses*. Forbes. <https://www.forbes.com/sites/forbesbusinesscouncil/2023/05/25/four-risks-and-challenges-of-ai-democratization-for-businesses/>
- Euroopan parlamentti. (2020). *Tekoäly: mahdollisuuksia ja uhkia | Ajankohtaista | Euroopan parlamentti* [Www.europarl.europa.eu](http://www.europarl.europa.eu). <https://www.europarl.europa.eu/news/fi/headlines/society/20200918STO87404/tekoaly-mahdollisuuksia-ja-uhkia>
- Fertik, M. (2019). *Why Customer Engagement Should Be Every Business's Top Priority in 2020*. Forbes. <https://www.forbes.com/sites/michaelfertik/2019/12/16/why-customer-engagement-should-be-every-businesss-top-priority-in-2020/?sh=3670fc996214>
- Forman, J., & Damschroder, L. (2007). Qualitative Content Analysis. *Empirical Methods for Bioethics: A Primer*, 11, 39–62. [https://doi.org/10.1016/s1479-3709\(07\)11003-7](https://doi.org/10.1016/s1479-3709(07)11003-7)
- Gbadegeshin, S. A., Al Natsheh, A., Ghafel, K., Tikkanen, J., Gray, A., Rimpiläinen, A., Kuoppala, A., Kalermo-Poranen, J., & Hirvonen, N. (2021). WHAT IS AN ARTIFICIAL INTELLIGENCE (AI): A SIMPLE BUZZWORD OR A WORTHWHILE

INEVITABILITY? *ICERI2021*

*Proceedings.*

<https://doi.org/10.21125/iceri.2021.0171>

Ho, R. C. (2021). *Chatbot for Online Customer Service: Customer Engagement in the Era of Artificial Intelligence*. Impact of Globalization and Advanced Technologies on Online Business Models. <https://www.igi-global.com/chapter/chatbot-for-online-customer-service/272478>

Jain, R. (2023). The Impact of Artificial Intelligence on Business: Opportunities and Challenges. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4407114>

Janiesch, C., Zschech, P., & Heinrich, K. (2021). Machine learning and deep learning. *Electronic Markets*, 31, 685–695. Springer. <https://doi.org/10.1007/s12525-021-00475-2>

Jarman, P. (2021, July 2). *Council Post: Managing Customer Expectations In A Changing Digital Landscape*. Forbes. <https://www.forbes.com/sites/forbestechcouncil/2021/06/02/managing-customer-expectations-in-a-changing-digital-landscape/>

Jouni Tuomi, & Anneli Sarajärvi. (2019). *Laadullinen tutkimus ja sisällönanalyysi*. Tammi.

Kleinings, H. (2023). *8 Applications of Artificial Intelligence in Business*. Leivity.ai. <https://levity.ai/blog/8-uses-ai-business>

Martinez, R. (2019). Artificial Intelligence: Distinguishing Between Types & Definitions. *Nevada Law Journal*, 19(3). <https://scholars.law.unlv.edu/nlj/vol19/iss3/9/>

Marr, B. (2021). *What Is The Role Of Artificial Intelligence In Business?* Bernard Marr.  
<https://bernardmarr.com/what-is-the-role-of-artificial-intelligence-in-business/>

Mckinsey & Company. (2023). *The state of AI in 2023: Generative AI's breakout year* | McKinsey. McKinsey.com.  
<https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2023-generative-ais-breakout-year>

Minkkinen, M., & Mäntymäki, M. (2023). *Tekoälyn ongelmiin on puututtava nyt eikä vasta sitten, kun on myöhäistä.* MustRead.  
<https://www.mustread.fi/artikkelit/tekoalyn-ongelmiin-on-puututtava-nyt-eika-vasta-sitten-kun-on-myohaista/>

Moser, A., & Korstjens, I. (2018). Series: Practical Guidance to Qualitative research. Part 3: Sampling, Data Collection and Analysis. *European Journal of General Practice, 24*(1), 9–18. Tandfonline.

Morgan, B. (2023). *What Impact Will AI Have On Customer Service?* Forbes.  
<https://www.forbes.com/sites/blakemorgan/2023/08/16/what-impact-will-ai-have-on-customer-service/?sh=9bfd18c6aa69>

R. Nalini. (2024). Transformative Power of Artificial Intelligence in Decision-Making, Automation, and Customer Engagement. *Advances in Logistics, Operations, and Management Science Book Series*, 189–208. <https://doi.org/10.4018/979-8-3693-0712-0.ch009>

Naz, N., Gulab, F., & Aslam, M. (2022). Development of Qualitative Semi-Structured Interview Guide for Case Study Research. *Competitive Social Science Research*

*Journal*, 3(2), 42–52.  
<https://cssrjournal.com/index.php/cssrjournal/article/view/170/72>

Panel, E. (2023). *Council Post: 10 Hurdles Companies Are Facing When Implementing AI (And How To Overcome Them)*. Forbes.  
<https://www.forbes.com/sites/theyec/2023/10/25/10-hurdles-companies-are-facing-when-implementing-ai-and-how-to-overcome-them/?sh=727823794c91>

Rashid, Y., Rashid, A., Warraich, M. A., Sabir, S. S., & Waseem, A. (2019). Case Study method: a step-by-step Guide for Business Researchers. *International Journal of Qualitative Methods*, 18(18), 1–13. Sagepub.  
<https://doi.org/10.1177/1609406919862424>

Reim, W., Åström, J., & Eriksson, O. (2020). Implementation of Artificial Intelligence (AI): A Roadmap for Business Model Innovation. *AI*, 1(2), 180–191.

Ritter, T., & Pedersen, C. L. (2020). Digitization capability and the digitalization of business models in business-to-business firms: Past, present, and future. *Industrial Marketing Management*, 86(0019-8501), 180–190.  
<https://doi.org/10.1016/j.indmarman.2019.11.019>

Russell, S., & Norvig, P. (2016). *Artificial Intelligence A Modern Approach Third Edition*.  
[https://people.engr.tamu.edu/guni/csce421/files/AI\\_Russell\\_Norvig.pdf](https://people.engr.tamu.edu/guni/csce421/files/AI_Russell_Norvig.pdf)

Saunders, C., Sivo, S., Chang, Q., & Jiang, J. (2006). How Low Should You Go? Low Response Rates and the Validity of Inference in IS Questionnaire Research. *Journal of the Association for Information Systems*, 7(6), 351–414.  
<https://doi.org/10.17705/1jais.00093>

- Sharma, N., Sharma, R., & Jindal, N. (2021). Machine Learning and Deep Learning Applications-A Vision. *Global Transitions Proceedings*, 2(1). <https://doi.org/10.1016/j.gltip.2021.01.004>
- Sheikh, H., Prins, C., & Schrijvers, E. (2023). Artificial Intelligence: Definition and Background. *Research for Policy*, 15–41. [https://doi.org/10.1007/978-3-031-21448-6\\_2](https://doi.org/10.1007/978-3-031-21448-6_2)
- Singh, J., Flaherty, K., Sohi, R. S., Deeter-Schmelz, D., Habel, J., Le Meunier-FitzHugh, K., Malshe, A., Mullins, R., & Onyemah, V. (2019). Sales profession and professionals in the age of digitization and artificial intelligence technologies: concepts, priorities, and questions. *Journal of Personal Selling & Sales Management*, 39(1), 2–22. <https://doi.org/10.1080/08853134.2018.1557525>
- Sirkka Hirsjärvi, & Hurme, H. (2008). *Tutkimushaastattelu teemahaastattelun teoria ja käytäntö* Sirkka Hirsjärvi & Helena Hurme. Helsinki Gaudeamus Helsinki University Press.
- Soni, N., Sharma, E. K., Singh, N., & Kapoor, A. (2020). Artificial Intelligence in Business: From Research and Innovation to Market Deployment. *Procedia Computer Science*, 167(1), 2200–2210. <https://doi.org/10.1016/j.procs.2020.03.272>
- Srivastava, B., Nikolich, A., & Koppel, T. (2023). AI and elections: An introduction to the special issue. *Ai Magazine*, 44(3), 216–217. <https://doi.org/10.1002/aaai.12110>
- Velu, P., & B, V. (2020). (PDF) *ROLE OF ARTIFICIAL INTELLIGENCE IN BUSINESS TRANSFORMATION*. ResearchGate. [https://www.researchgate.net/publication/345304894\\_ROLE\\_OF\\_ARTIFICIAL\\_INTELLIGENCE\\_IN\\_BUSINESS\\_TRANSFORMATION](https://www.researchgate.net/publication/345304894_ROLE_OF_ARTIFICIAL_INTELLIGENCE_IN_BUSINESS_TRANSFORMATION)

Wang, R. "Ray. (2016). *Research Summary: Why Live Engagement Marketing Supercharges Event Marketing*. Constellation Research Inc. <https://www.constellationr.com/blog-news/research-summary-why-live-engagement-marketing-supercharges-event-marketing>

Weitzman, T. (2022). *Council Post: The Top Five Ways AI Is Transforming Business*. Forbes. <https://www.forbes.com/sites/forbesbusinesscouncil/2022/11/21/the-top-five-ways-ai-is-transforming-business/?sh=6c9906fe8e7f>

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Sage Publications.

## 7 Appendices

### Appendix 1. The Interview

#### **Implementation and Development of Artificial Intelligence**

Do you use artificial intelligence in your work? Could you describe your experiences or observations on the role of AI in your work or business?

Do you feel that AI could be a part of your work, and how could it assist?

#### **Customer Interaction and Experience**

How has AI affected or changed customer interaction and experience from your perspective?

#### **Sales and Business Growth**

What kind of effects has the adoption of AI had on sales and business growth?

#### **Benefits and Reception of the Housing Agent**

How has the implementation of the housing agent affected your company's operations, and how have its benefits or challenges been perceived within your organization?

#### **Challenges and Solutions**

What challenges have you encountered in the implementation of AI, and how have you approached these challenges? Or do you have any preconceived notions about the challenges AI might bring?

#### **Competitive Advantage and Distinctions**

Do you see AI affecting company competitive advantage or differentiation in the market?

#### **Customer Data and Analytics**

How has AI affected or could affect the processing and analysis of customer data in your work?

#### **Innovation and Future Plans**

Related to your role: What opportunities or plans do you see for AI in the future?



**Appendix 2. Interviewee's summary**

<b>Interviewee</b>	<b>Role in the Organization</b>	<b>Interview Duration (hh:mm)</b>
1	Manager	59:40
2	Manager	48:20
3	Manager	40:15
4	Manager	44:30
5	Manager	1:03:20
6	Sales/Customer Service	20:40
7	Sales/Customer Service	25:30
8	Sales/Customer Service	23:15
9	Sales/Customer Service	19:50
10	Sales/Customer Service	21:00