Exploring AI Adoption in Entrepreneurial Content Marketing Strategies of European Companies



Authors: Johan Valeur and Mantas Liekis

Master's Programme in Entrepreneurship and Innovation

ABSTRACT

Artificial intelligence has recently gained enormous attention due to its potential to revolutionize many industries. One of these areas of interest where AI may have the potential to have a significant impact is content marketing. The scientific community has studied AI for many years to build an understanding of what purposes it could be used for. However, few studies have examined how and why AI is adopted by companies today to leverage it for entrepreneurial marketing purposes and what the diffusion of this technology looks like in society. This master thesis investigated how the adoption process of AI tools looks today by conducting a literature review and performing interviews with 12 leading decision makers of marketing. Data from the primary collection was analysed using thematic analysis, and seven themes were discovered. The results identified several perceived benefits of adopting new AI tools, including improved efficiency, user-friendliness and saving resources like time and money. The findings also revealed a potential connection between technology adoption and the user's background, where priority exposure to novel technology contributed to the ease of adoption. The practical implications from a user-centric point of view indicated that language models like ChatGPT could be leveraged to optimize content creation for social media and SEO (Search Engine Optimisation). Other AI tools can be used for email marketing campaigns, such as Nifty and Zapier AI, which can automate tasks and enhance personalization. AI text-generators such as Copy.ai and Grammarly can be used to improve brand communication, and image-generating tools like DALL-e may be used for content creation. From a producer-centric point of view, the findings suggest the importance of intuitive user-friendliness and pricing when designing AI tools. Communication of these benefits and understanding specific use cases may be crucial for developing tools and their marketing. Overall, this study highlighted the factors influencing the adoption and leverage of AI tools to enhance entrepreneurial marketing efforts.

Keywords: Entrepreneurial marketing, Artificial intelligence, Marketing, Technology adoption, Machine learning, Customer journey, AI tools.

ACKNOWLEDGEMENTS

The authors of this Master's thesis want to thank Dr Johannes Gartner for his support and supervision sessions during the master's thesis. Furthermore, the master's thesis authors want to show appreciation to the 12 interview participants who agreed to be interviewed and shared their insights about AI tools, marketing, innovations, etc. Finally, we are happy to contribute our findings to the scientific community and share our passion for entrepreneurship, artificial intelligence and marketing.

TABLE OF CONTENTS

1	Intr	oduction	1
	1.1	Academic contribution	2
	1.2	Key Concepts	3
2	Lite	erature review	5
	2.1	Artificial intelligence	5
	2.2	Deep learning	6
	2.3	Machine learning	8
	2.4	Digital Marketing	9
	2.5	Content marketing	10
	2.6	Customer journey	11
	2.7	Entrepreneurial marketing	13
	2.8	AI tools	14
	2.9	Negative aspects of AI	16
	2.10	Innovation adoption in companies	17
	2.11	Research problem and question	18
	2.12	Aim of the study	19
3	Met	thodology	20
	3.1	Research design	20
	3.2	Data collection	21
	3.2.1 Secondary data collection: literature study		22
	3.2.	2 Primary data collection: interviews	23
	3.3	Data Analysis	26
	3.4	Limitations	27
	3.4.	1 Qualitative Research	28
	3.4.	2 Primary Data Collection	29
	3.4.	3 Secondary Data Collection	29
	3.4.	4 Qualitative thematic analysis	30
	3.5	Ethical Considerations	30
	3.6	Transcribing	31
4	Fine	dings and analysis	32
	4.1	Introduction	32

4.1 tec	.1 Theme 1 - Variables affecting tech and AI adoption - what leads to the adoption of hnology in the company?	35
4.1		ls?
4.1 bu	.3 Theme 3 - Content marketing - how participants use AI for content marketing within the sinesses	
4.1 bu	.4 Theme 4 - AI tools - artificial intelligence tools that interviewees use within their sinesses	38
4.1 set	.5 Theme 5 - Customer journey - how does the customer journey look like in a business ting? 41	
4.1 wh	.6 Theme 6 - AI benefits/effects on the business - how do AI tools benefit companies, and at effect do these tools have?	
4.1 and	.7 Theme 7 - Challenges in marketing - challenges that interviewees face in creating conte	
5 Di	scussion	44
5.1	Introduction	44
5.2	Negative aspects of AI	44
5.3	AI tools	45
5.4	Content marketing	46
5.5	AI benefits/effects on the business	46
5.6	Variables affecting adoption of technology and AI	47
5.7	Challenges in marketing	48
5.8	Customer Journey	49
6 Co	nclusion	50
6.1	Introduction	50
6.2	Adoption and leverage of AI tools	51
6.3	Practical implications	51
6.3	3.1 User-centric	51
6.3	3.2 Producer-centric	52
6.4	Theoretical implication	52
6.5	Political implications	53
6.6	Limitations - reliability and validity of the results	53
6.7	Further research	54
7 Re	ferences	55
8 Ar	pendix	67

1 Introduction

This chapter aims to familiarize the reader with the topic of the thesis, providing background information on the key concepts related to the research question and outlining the research problem. Additionally, the chapter will present the scope and importance of the study.

Advancements in digital technologies have brought new opportunities for entrepreneurial activities (Nambisan, 2017). The recent emergence of artificial intelligence (AI) is undergoing a technological revolution, changing the foundations of how intellectual capital is being utilized today, and the importance of keeping up with its development is becoming rapidly important (Mariani, Perez-Vega & Wirtz, 2022). Entrepreneurs/business owners can leverage digital technologies to gain a competitive advantage in the marketplace (Shehadeh, Almohtaseb, Aldehayyat, Abu-AlSondos, 2023). Additionally, the central aspect of digitalization is the ability to reach potential customers, provide more value and automate repetitive tasks (Verhoef, Broekhuizen, Bhattacharya, Dong, Fabian, Haenlein, 2021).

In recent years, there has been an increasing interest from researchers and business owners in AI and its application in entrepreneurial marketing, with the release of new AI tools such as "ChatGTP" (Lee, Bubeck & Petro, 2023). AI-based tools have the potential to revolutionize the world of external marketing, driving the need for entrepreneurs and business owners to stay updated with these new technologies to maintain competitiveness in the marketplace (Haleem, Abid, Javaid, Mohd, Qadri, Singh, Ravi, Suman & Rajiv, 2022). Taking into consideration that AI appeared in the early 20th century (Hildebrand, 2019). However, only in 2022 got more attention from the public due to its technological advancement (Mukhamediev, Popova, Kuchin, Zaitseva, Kalimoldayev, Symagulov, Levashenko, Abdoldina, Gopejenko, Yakunin, Muhamedijeva & Yelis, 2022). By leveraging AI tools, companies can save time and improve their efficiency by automating tasks previously performed by employees (Choudhury, Starr & Agarwal, 2020). According to Perifanis and Kitsios (2023), AI provides an opportunity to increase productivity and lower costs. However, despite the positive aspects of artificial intelligence, it is essential to acknowledge that there are growing concerns about the possibility of AI replacing low-skilled service-based jobs and professional work, which may lead to a surge in unemployment rates and an increase in inequality in the coming years (Korinek & Stiglitz, 2017; Susskind & Susskind,

2015). Therefore, it is crucial to gain insights into how businesses that do not use new technologies may lose their competitiveness in the market.

Moreover, scientific literature indicates that the field of marketing will be highly affected by AI in the upcoming years (Dwivedi, Ismagilova, Hughes, Carlson, Filieri, Jacobson, Jain, Karjaluoto, Kefi, Krishen, Kumar, Rahman, Raman, Rauschnabel, Rowley, Salo, Tran & Wang, 2021). Marketing evolved in the early 21st century, and digital networks were increasingly incorporated into marketing strategies (Faruk, Rahman & Hasan, 2021). With time, digital marketing campaigns became the main focus (Dwivedi et al. 2021). These campaigns included a combination of external marketing, for example, content marketing, ads, email, SEO, and social media (Dwivedi et al. 2021). As technological advancements continue, artificial intelligence has begun to be used in marketing and other industries (Rust, 2020).

AI has shown that it can play a crucial role in marketing, improving businesses efficiently and opening new opportunities for businesses (Verma, Sharma, Deb & Maitra, 2021). New AI tools based on creating marketing solutions can quickly adjust to shifting business requirements and propose appropriate communications and solutions beneficial to relevant parties (Haleem et al. 2022). Several previous studies have evaluated the impact of artificial intelligence on specific digital marketing functions individually (Stalidis, Karapistolis & Vafeiadis, 2015; Jarek & Mazurek, 2019). Although, there are a limited amount of studies on how artificial intelligence affects companies and content marketing and what types of AI-based external marketing tools companies focus on to get a competitive advantage.

1.1 ACADEMIC CONTRIBUTION

This thesis aims to extend the research on AI-based tools for content marketing in European companies and understand their current integration. The objective is to make a contribution to the current research on two different aspects through this approach. Firstly, interviewing companies to understand the current use of AI when applied to entrepreneurial marketing will provide a deeper understanding of how companies in Europe adopt and leverage AI tools to enhance their online marketing efforts. By studying the strategies applied by companies, the thesis will expand on the scientific knowledge beyond the current focus on the general application of AI in marketing

(Haleem et al. 2022; Kose & Sert, 2017; Peyravi, Nekrošienė & Lobanova, 2020). By applying a systematic and comprehensive approach, the study will also use and expand on the current literature regarding the use of AI tools in this specific business context (Haleem et al. 2022; Peyravi, Nekrošienė & Lobanova, 2020).

In summary, this thesis aims to contribute to existing research regarding AI and marketing by expanding the scientific understanding of AI tools and their integration in European companies and identifying AI tools with the potential to improve online content marketing.

1.2 KEY CONCEPTS

Artificial intelligence (AI) can be described as a computer system where algorithms are able to learn to form an existing data set and, based on that information, generate statistically driven predictions and make decisions (Choudhury, Starr & Agarwal, 2020).

Machine learning (ML) can be described as an innovative technology in the computer science industry that has the potential to transform how businesses operate and attain their set goals (Chatterjee, Chaudhuri, Kamble, Gupta & Sivarajah, 2022a). According to Nichols, Herbert Chan & Baker (2018), machine learning is the process by which computers utilize mathematical models, statistical algorithms, and provided databases to make informed and intelligent decisions.

Deep Learning (DL) can be described as a type of machine learning that uses artificial neural networks (ANN) with representation learning, where these neural networks aim to mimic the functionality of the human brain (LeCun, Bengio & Hinton, 2015).

Content marketing can be described as a marketing strategy that involves creating and sharing brand/business-related and personalized content relevant and valuable to target groups, for example, current or potential customers. Usually, the written content is shared via digital platforms and newspapers to achieve set marketing/business goals (Wang, Malthouse, Calder & Uzunoglu, 2019).

Digital Marketing is described as online marketing that includes a variety of strategies and tactics that can be used to reach and engage with potential customers via digital channels (Veleva & Tsvetanova, 2020). These channels mainly include channels businesses choose to use to achieve business and marketing objectives. Social media marketing, content marketing, SEO, email marketing, video marketing, etc., can be used for digital marketing (Li, Chan, Chow, Zhang, Tong & Keung, 2022).

Business-to-business (**B2B**) refers to the interactions and transactions that occur between two businesses. This can include sales, services, marketing, or information from one business to another (Bakhtieva, 2017).

Business-to-customer (**B2C**) refers to the interaction and transactions that occur between a business and an individual end-customer (Neuhaus, Millemann & Nijssen, 2022).

Customer journey (CJ) can be described as customer interaction with a company during a purchasing journey, which can be separated into different phases (Lemon & Verhoef, 2016).

2 LITERATURE REVIEW

This literature review explores AI technology and how it works and then elaborates on the foundations of marketing to which AI may be applied. By reviewing existing literature, this study aims to provide insights into the background and current state of research regarding AI, machine learning, deep learning, content marketing, entrepreneurial marketing, customer journey and how AI tools are used today.

2.1 ARTIFICIAL INTELLIGENCE

Artificial intelligence is a new form of computer technology that is developing rapidly today and has a vast potential of use cases that can be applied in a variety of industries to perform analysis, with some examples being in areas such as health care, food safety and mineral processing (Mishra, 2021; Phatak, Wieland, Vempala, Volkmar & Memmert, 2021). AI and machine learning can be described as computer systems where algorithms are able to learn to form an existing data set and, based on that information, generate statistically driven predictions and make decisions (Choudhury, Starr & Agarwal, 2020). AI is often referred to as intelligent due to its ability to use a substrate of data and adapt it to new data or inputs, which may be used for decision-making in different areas (Roundy, 2022). Although AI may be referred to as intelligent and have the ability to be used to replace some human intelligence in some tasks, its limitations lie in the way it makes decisions. AI uses mathematical techniques that are able to make predictions on previous data but does not have the ability to understand or explain why a particular decision was made (Roundy, 2022). This makes it different from human intelligence and may not be as flexible or adaptable as human decision-making. Therefore there is a general need for AI and ML models to be customized to accurately be able to make decisions in different industries that serve various purposes, creating task-specific tools (Momade, Durdyev, Estrella & Ismail, 2021).

The quick immersion of AI may lead to many possibilities, but some concerns could also arise. Due to the recent advancements in AI, there has been a growing discourse about AI and its ethics, leading to a discussion on how it should be or should not be regulated (Stix, 2022). According to Stix (2022), the European Union (EU) is likely to implement new regulations on AI technology in

order to get a first-mover advantage in defining what a "trustworthy AI" may be considered. This could reshape the current landscape of what AI technology allows.

AI was initially coined by McCarthy, Minsky, Rochester, Corporation, & Shannon (1955) and even though AI may be viewed as a novel subject today, research on AI goes back as far as the 1950s when Alan Turing first published his research leading to the "Turnig test", proposing that machines can think (Turing, 2004). The "Turing test" needs three actors in order to be performed: A human, a computer, and a human judge, who are only allowed to communicate via text; if the judge cannot effectively distinguish between the AI and human, the software can be considered to be an AI (Turing, 2004). This was one of the first ways to define what an AI system was, but since then, there have been more tries to find new definitions.

Russell, Norvig & Davis (2010) continued the discussion about AI in their book: "Artificial Intelligence: a modern approach". Russell, Norvig & Davis (2010) state that when designing AI, the goal is to create a system that can perform intelligent tasks that typically require human input. The authors displayed definitions of AI in four categories: Thinking humanly, acting humanly, thinking rationally, and acting humanly, and claim that there are different approaches to define AI depending on which goals are in mind (Russell, Norvig & Davis, 2010).

For this thesis, AI will be defined as the branch of computer science concerned with building intelligent machines capable of performing tasks that typically require human intelligence. In parallel to AI, the technology allowing its true potential lies within its ability to learn based on large amounts of data set, and this is where deep learning, a subfield of AI, can be integrated (Hinton & Salakhutdinov, 2006).

2.2 DEEP LEARNING

Deep learning is considered to be the technology of the fourth Industrial Revolution (Sarker, 2021). Recently this technology has gotten more attention from the media, scientists, and business professionals due to the ability to process large amounts of data derived from artificial neural networks (Hinton & Salakhutdinov, 2006). Moreover, deep learning can be called representation learning (Alzubaidi, Zhang, Humaidi, Al-Dujaili, Duan, Al-Shamma, Santamaría, Fadhel, Al-Amidie & Farhan, 2021). Unlike traditional machine learning methods, deep learning can

automatically learn many things for multiple tasks (LeCun, Bengio & Hinton, 2015). According to Sarker (2021), deep learning is used in various industries, for example, cybersecurity, data analysis, virtual reality, healthcare, and text analytics. DL is a cutting-edge technology based on three or more artificial neural networks (Abdolrasol, Hussain, Ustun, Sarker, Hannan, Mohamed, Ali, Mekhilef & Milad, 2021). These neutral networks try to mimic the human brain's capabilities to be able to learn from large amounts of information and make accurate predictions (Abdolrasol et al. 2021). Moreover, DL technology is the foundation for many AL applications which do not require additional maintenance, and the advancement of this revolutionising technology has enabled scientists to create models that are capable of replacing human employees in specific business areas; precisely for this reason, large companies like Apple, Google, Microsoft try to use deep learning to support businesses processes (Karhunen, Raiko & Cho, 2015).

Many different industries and companies have been affected by DL (Chatterjee, Chaudhuri, Vrontis & Papadopoulos, 2022b). Companies attempt to apply this technology to transform their businesses globally (Alzubaidi et al. 2021). Competition arises when companies pursue superior DL technology, driving innovation and benefiting the industry while advancing the technology further (Alzubaidi et al. 2021). Taking into consideration that this technology is already way more advanced than human performance and can be used in these business-related fields: advertisements, price prediction, tracking, data analysis, personalization, biometrics, web page ranks, sentiment analysis, etc. (Alzubaidi et al. 2021).

Despite the impressive capabilities of deep learning, this technology has some limitations. One of the main limitations of deep learning is its lack of transparency, which makes it difficult to understand how these models make their predictions (Linardatos, Papastefanopoulos & Kotsiantis, 2020). Additionally, deep learning algorithms are highly susceptible to adversarial examples, where small perturbations to the input data can cause the model to make incorrect predictions (Ren, Zheng, Qin & Liu, 2020). Another limitation of deep learning is its reliance on large amounts of specific data, which can be difficult and time-consuming to obtain (Karimi, Derr & Tang, 2020). Lastly, it is also expensive to use deep learning, AI, and ML in business (Puangpontip & Hewett, 2022).

The latest technologies will continue to improve and, over time, will help optimize businesses, reduce the number of inefficient employees, and face data protection and ethics problems. While

DL focuses on using artificial networks to process large amounts of data, another subset of AI called Machine learning (ML) encompasses a broader range of algorithms and technology, enabling AI to make intelligent decisions based on the provided data.

2.3 MACHINE LEARNING

ML is cutting-edge technology in computer science and may revolutionize how companies function and achieve business objectives in the future (Chatterjee et al. 2022a). Machine learning refers to a computer's ability to make intelligent decisions based on provided databases, mathematical models, and statistical algorithms (Nichols et al. 2018). Moreover, machine learning can be divided into three main groups: supervised, unsupervised and reinforcement ML (Alloghani, Al-Jumeily, Mustafina, Hussain & Aljaaf, 2019). Data used for machine learning is precise, extensive, and unique, which allows algorithms to make specific predictions (Nichols et al. 2018). Improvements in machine learning technology have already started to change employees in companies, considering that machines are more efficient than humans; machines do not require natural resources, emotional support, or sleep (Korinek, Schindler & Stiglitz, 2021). With technological advancement, some companies started implementing machine learning into their business to achieve business objectives and improve decision-making, efficiency, and productivity (Shrestha, Krishna & von Krogh, 2021).

Today machine learning has become a powerful tool in business due to technological advancement; small and big companies can gather a lot of data, which can be analyzed by algorithms faster than humans (Shrestha, Krishna & Krogh, 2021). Therefore, there is a high probability that companies that do not use new technologies will lose their competitive advantage in the marketplace (Tornikoski, Rannikko & Heimonen, 2017). Furthermore, there exist certain restrictions to the implementation of machine learning in a business context, and a business must have new technologies, extensive databases, professional programmers, resources, and ethical considerations to be able to take advantage of ML (Mukhamediev, Ravil, Popova, Kuchin, Symagulov, Levashenko, Zaitseva, Kalimoldayev, Abdoldina, Gopejenko, Yakunin, Muhamedijeva & Yelis, 2022). Moreover, ML learning needs to be supervised and trained by professionals; otherwise, this technology can not function properly (Janiesch, Zschech & Heinrich, 2021).

Despite tremendous interest in machine learning, this field is still new and requires more attention and development in order to develop further (De Mauro, Sestino & Bacconi, 2022). Future predictions show it, enabling AI to make intelligent decisions based on the provided data, digital marketing, data analysis, decision-making, and customer experience (De Mauro, Sestino & Bacconi, 2022). The current business landscape may be affected by ML, and it is precisely for this reason that businesses need to strive to adopt new technologies.

The increasing development of AI, with its subset of DL and ML empowering it, has enabled it to be leveraged for marketing purposes (Davenport, Guha, Grewal & Bressgott, 2020). Marketing has also continued to evolve into the digital era, where the concept of digital marketing has become increasingly prevalent, enabling it to merge with AI (Davenport et al. 2020).

2.4 DIGITAL MARKETING

A marketing strategy is necessary for business success (Li et al. 2022). Currently, marketing can be divided into traditional and digital marketing, where traditional marketing includes newspapers, magazines, and tv commercials, while digital marketing includes: social media, email (Li et al. 2022). Digital marketing is defined as using new technologies to help acquire new clients by giving customers personalized content and services (Langan, Cowley & Nguyen, 2019). Most often, computers, telephones, tablets, and other devices are used for digital marketing campaigns to reach more potential customers (Langan et al., 2019). Digital marketing can benefit companies by accessing customer data like behaviour and desires (Bala & Verma, 2018). For these reasons, companies have understood the importance of digital marketing in today's market. Because of that, companies need to use digital and traditional marketing to get a competitive advantage in the marketplace (Bala & Verma, 2018). Digital marketing has created new opportunities for small and big businesses to reach more potential clients and get brand awareness (Bala & Verma, 2018). Companies that use digital marketing can expect better results than traditional marketing because companies that use the latest technology can collect more data, optimize marketing companies, save money, and target specific customers (Verma, Sharma, Deb & Maitra, 2021).

Digital marketing can use many tools to reach potential customers (Sharma, 2021). Some examples of tools are online service tools, blogs, SEO, landing pages, email marketing, graphic creation,

lead enrichment, and conversion optimization tools (Fierro, Arbelaez & Gavilanez, 2017). In terms of marketing tools, companies that do not take advantage of these tools lose a competitive advantage (Bala & Verma, 2018). Therefore, the company must use the latest technologies, understanding that it will be necessary to learn to use new technologies faster and faster in order to stay in the market (Ahi, Sinkovics, Shildibekov, Sinkovics & Mehandjiev, 2022).

With the development of new cutting-edge technologies, AI is emerging, which can improve the quality, efficiency, and effectiveness of digital marketing (Rizvanović, Zutshi, Grilo & Nodehi, 2023). AI-based digital marketing enables companies to get a competitive advantage in the marketplace (Rizvanović et al. 2023). Companies can use AI-based digital marketing to reach more potential clients, get deeper customer insights, use personalized advertisements (Haleem et al. 2022).

Within digital marketing, it is essential to create valuable content that can attract and retain consumers (Kose & Sert, 2017). A subcategory of digital marketing can be titled "Content marketing", which mainly focuses on creating content that can be employed in digital marketing strategies to optimize campaigns and provide personalized experiences (Kose & Sert, 2017).

2.5 CONTENT MARKETING

Nowadays, companies often use content marketing (Kose & Sert, 2017). Moreover, according to Kose and Sert (2017), content marketing is a component of a marketing strategy that includes using various channels, for example, blogs, SEO, case studies, and info-graphics. Content marketing is used to gain awareness and new customers (Pulizzi, 2012).

In addition, according to Ahmad, Musa and Harun (2016), content marketing can help with customer conversion, lead conversion and nurturing, customer service, customer upsell, passionate subscribers, and brand awareness/reinforcement. In addition, Lou, Xie, Feng & Kim (2019) state that personalized content for a target audience can benefit the company's reputation and revenues. Moreover, Dwivedi et al. (2021) explain why company owners and CEOs must leverage new technologies in marketing to make more personalized content suited for potential customers. It is abundantly clear that with the advancement of new technologies, content marketing will be used more often by big to small brands (Bermeo-Giraldo, Valencia-Arias, Ramos de Rosas, Benjumea-

Arias & Villanueva, (2022). One technology that has the potential to revolutionize content marketing is called "Artificial intelligence" (Haleem et al. 2022). AI can be used to do marketing work faster (Haleem et al. 2022). Artificial intelligence can be applied in content marketing in different ways; for example, AI can be used as a support tool for content marketing revision, preparation, and application (Kose & Sert, 2017). Furthermore, AI can assist companies in problem-solving situations (Kose & Sert, 2017). AI can also help fix content marketing mistakes, optimization, feedback, forecasting, and employee support (Kose & Sert, 2017).

In conclusion, it is clear that content marketing is vital for company success, and it can also be part of a strategic marketing plan to gain new clients (du Plessis, 2022). A crucial aspect of content marketing is mapping the journey which a customer experiences when interacting with the company (Lemon & Verhoef, 2016). The mapping can help businesses gain insights into the marketing strategy by understanding customers' preferences and expectations regarding the content they are exposed to (Lemon & Verhoef, 2016).

2.6 CUSTOMER JOURNEY

In order to effectively market a product or service to a customer, it is essential to understand its behaviour and track individual touchpoints before, during, and after purchase; this process can be labelled as a "Customer journey" (CJ) (Pantouvakis & Gerou, 2022). According to Pantouvakis and Gerou (2022), the CJ is a phenomenon that has only recently gotten attention within the scientific community, which lacked empirical evidence, and they aimed to review the available literature on the subject. The authors found that CJ monitoring can help managers better understand their customer's decision-making, which can be helpful when allocating resources. In a study by Lemon and Verhoef (2016), they categorise the different touchpoints in the CJ as cognitive, behavioural, emotional, sensory, spiritual, and social. The authors also separated the CJ into three different phases. They were: Pre-purchase, purchase, and post-purchase (Lemon & Verhoef, 2016). Lemon and Verhoef (2016) describe the pre-purchase phase as the complete experience of the customer before pushing a product, and due to the new world of digital marketing, the customer may experience a much more comprehensive selection of options available compared to when customers only experienced offline advertising. This could make the CJ more complex since it is

not as linear, has become iterative, and can be time-consuming (D'Arco, Presti, Marino & Resciniti, 2019).

When the CJ becomes a complex process, it may require the marketer to consider many factors like psychology, motives, frequency of purchase, sociodemographic background, and number of touchpoints along the journey (D'Arco et al. 2019). The second step to consider in the CJ is the purchase phase, which is supposed to include all customer interactions with the brand and its environment, according to Lemon and Verhoef (2016). The touchpoints in the second step may vary but can be described as choice, ordering, and payment (Lemon & Verhoef, 2016). The final step is the postpurchase phase and is supposed to cover all the interactions with the brand and its environment after the purchase (Lemon & Verhoef, 2016).

The growing amount of data generated in marketing surrounding the CJ in each phase can create a problem in marketing since it is often both specific and more reliant on its customers, which makes them less flexible in adapting to new industry trends (Bakhtieva, 2017). An example of a CJ can be broken down into each of these phases, with pre-purchase containing touchpoints like search/click activity, social media, and email or chatbots (Bakhtieva, 2017). The purchase phase may contain touchpoints like e-commerce (Bakhtieva, 2017). The post-purchase phase may contain similar touchpoints as the pre-purchase face, containing social media, surveys, and email/chatbots (Bakhtieva, 2017).

According to D'Arco et al. (2019), AI may be used to analyse big data and help in decision-making for the marketer. When D'Arco et al. (2019) analysed how AI may be applied in customer journey modelling, they suggested ten applications:

(1) customer profiling; (2) promotion strategy; (3) client acquisition; (4) ad targeting; (5) demand forecasting; (6) pricing strategy; (7) purchase history; (8) predictive analytics; (9) monitor consumer sentiments; and (10) customer relationship management (CRM) activities (D'Arco et al. 2019, p.112).

The author suggested that managers and decision-makers may use this framework to create a competitive advantage in order to implement data and turn it into insights and ideas to solve problems and increase customer value.

Marketing B2B CJ can be compared and even be similar to a B2C CJ, but according to Neuhaus, Millemann and Nijssen (2022), there are some key differences. According to the authors, the different approaches need to take into consideration that B2B customers are typically motivated by factors such as cost savings, risk management and efficiency compared to B2C customers, who may be more motivated by factors like emotional appeal, status and convenience (Neuhaus, Millemann & Nijssen, 2022). Depending on the region, there may also be some legal regulations that can differ between B2B and B2C marketing regarding how some messages may be communicated (Neuhaus, Millemann & Nijssen, 2022).

Overall, it can be beneficial to map out the customer journey to understand and optimize a company's marketing efforts (Lemon & Verhoef, 2016). This can be especially important when there is a limited amount of resources to spend on marketing, which is often the case for smaller companies (Sarasvathy, 2001). This has led to an emerging entrepreneurial marketing strategy (Sarasvathy, 2001).

2.7 Entrepreneurial marketing

Entrepreneurial marketing is particularly relevant for small to medium enterprises (SMEs) that operate with limited resources, including monetary, human, and intellectual capital (Sarasvathy, 2001). According to Sarasvathy (2001), these constraints often necessitate efficient resource utilization and a need for quick marketing results. The marketing strategy plays a crucial role for SMEs as it provides rapid access to the market, which is essential when financial capital is limited (Sevilla-Bernardo, Sanchez-Robles & Herrador-Alcaide, 2022). In fact, marketing strategy is ranked as the fourth most important factor for success in companies with limited resources, like startups, due to the unique circumstances and pressures SMEs face (Sevilla-Bernardo, Sanchez-Robles & Herrador-Alcaide, 2022).

The emergence of digital transformation has significantly impacted entrepreneurial marketing, and the level of digitalization can influence a company's marketing strategy (Hull, Hung, Hair, Perotti & DeMartino, 2007). SMEs may rely entirely on digital marketing or adopt a combination of digital and traditional marketing, depending on their level of digitalization and product offering (Hull et al. 2007). Even SMEs selling traditional products are likely to incorporate digital

marketing elements, such as having a website, due to its benefits, such as low cost and accurate customer relationship management (Hull et al. 2007).

In contrast to traditional marketing, entrepreneurial marketing emphasizes the utilization of new tools and approaches to achieve marketing goals without excessive resource consumption or extensive hiring (Alareeni, Hamdan, Hamdan, & Shoaib, 2022). It is a preferred approach for new companies aiming to reach their potential customers and thrive in uncertain environments (Alareeni et al. 2022). While entrepreneurial marketing is commonly associated with small businesses, larger companies can also adopt an entrepreneurial mindset to drive their marketing efforts. Richard Branson's Virgin enterprise serves as an example of a larger company operating across sectors while consistently exhibiting an entrepreneurial approach in identifying and pursuing new market prospects (Collinson & Shaw, 2001). However, sustaining an entrepreneurial marketing approach in larger organisations often requires a visionary leader (Collinson & Shaw, 2001).

By embracing entrepreneurial marketing, SMEs and larger companies can leverage innovative strategies and tools to optimize their marketing efforts, adapt to changing market dynamics, and achieve growth while efficiently using resources (Alqahtani, Uslay & Yeniyurt, 2022). Overall, entrepreneurial marketing offers a cost-effective approach to marketing strategy (Alareeni et al. 2022). AI has the opportunity to be used to enhance these marketing efforts, and due to the rapid development in current times, applied AI tools have started to reach the market (Davenport et al. 2020).

2.8 AI TOOLS

AI is a technology with many diverse use cases, but when applied to a specific task needs training and specialized customization to be able to perform the required task accurately (D'Arco et al. 2019). With the rapid development of AI, there have been a large number of AI tools created to be used for commercial purposes on the market (Haleem et al. 2022). In a study by Momade, Durdyev, Estrella and Ismail (2021), the authors were able to show clear evidence that in order to understand the effectiveness of AI tools, studies are going from applying a single AI tool using a hybrid of tools in order to see which tool may provide a better result in an apple-to-apple scenario.

Some examples of AI tools that could be applied in marketing are using AI in a CRM system, chatbots, personalization tools, predictive analysis, image recognition, and sentiment analysis (Peyravi, Nekrošienė & Lobanova, 2020). These tools may be used to enhance the customer journey for businesses. Moreover, Chen, Esperança & Wang (2022) showed that AI improves firms' performance compared to when AI is not used.

Furthermore, companies are currently using AI tools to process legal data and save time and resources (Perifanis & Kitsios, 2023). Some firms use AI tools to analyze their competitors, spot trends, and structure their strategic plans to gain a competitive advantage by studying published online content (Perifanis & Kitsios, 2023). In addition, some businesses use AI tools to observe the efficiency of their employees (Chowdhury, Dey, Joel-Edgar, Bhattacharya, Rodriguez-Espindola, Abadie & Truong, 2023), while others use AI to find trusted suppliers in the marketplace by extracting information from digital platforms and other systems (Al-Surmi, Bashiri & Koliousis, 2022). Moreover, AI can be used to track customer behaviour and digital footprints to analyze customer needs and improve conversion rates (Perifanis & Kitsios, 2023). For example, Google uses AI and ML to improve its efficiency and customer experience (Krogh, Ben-Menahem & Shrestha, 2021). In recent years, Google and its partners have invested heavily in AI technologies that speed up searches, recognize images, and assist people in searching (Perifanis & Kitsios, 2023). Another example includes the company "Refinitiv", which uses AI tools to generate predictive qualitative models for M&A targets, allowing them to make better decisions (Barnea, 2020). According to the scientific literature, companies should adopt new AI tools to improve their overall capabilities (Yigit & Kanbach, 2021). However, only a few companies currently implement AI tools within their businesses to improve their company efforts (Benbya, Pachidi & Jarvenpaa, 2021).

In conclusion, AI tools present both opportunities and challenges in business contexts. They are being used in various organizations to automate processes, save resources and time (Perifanis & Kitsios, 2023). Ultimately, AI tools can potentially influence the fundamental aspects of startups, medium and large companies. To make the most of AI's tools, businesses must be conscious of new technologies and how these technologies can be applied within the business. Even if AI and the tools its applied to have the potential to improve businesses, there are still some negative aspects of AI that are noteworthy to highlight.

2.9 NEGATIVE ASPECTS OF AI

In 2022, AI significantly impacted digital channels, companies, and created a new technologymoving trend (Cheng, Lin, Shen, Zarifis & Mou, 2022). Several researchers have explored the use of AI in different areas, such as marketing (Syam & Sharma, 2018). Other studies have also shown how AI is applied in business areas to become more competitive in the marketplace (Cheng et al., 2022). Moreover, research has indicated that AI can be used to enhance efficiency, effectiveness, and reduce costs in the business context (Cheng et al., 2022). Currently, AI is used for content, website, video, images, and post-generation (Haleem et al. 2022). By performing these tasks with AI, company employees save resources, time and increase the company's efficiency (Cheng et al., 2022). Despite the benefits, research has also indicated some negative aspects associated with AI use, such as data safety and job losses (Tarafdar, Gupta & Turel, 2013). Other adverse consequences of AI are concerned with its ethical use (Wang & Siau, 2018). In addition, legal and regulatory aspects, as well as ethical predicaments as well (Wirtz, Weyerer & Sturm, 2020). Moreover, AI databases can gather a lot of data about potential customers and gain a deep understanding of their needs and behaviours, which may affect privacy concerns (Grewal, Guha, Satornino & Schweiger, 2021). Moreover, according to Tai (2020), AI can significantly impact society, such as racial and wealth inequality (Mikalef, Conboy, Lundström & Popovič, 2022). According to Mikalef et al. (2022), AI may, in the future, become uncontrollable if it learns to control itself. If so, there may be a risk that it becomes manipulative by promoting biased information, which could affect political or public polarization (Mikalef et al. 2022).

To conclude, there are a complex array of potential advantages and disadvantages regarding using AI in business and daily life. However, business owners need to take proactive measures regarding adopting new technology, for example, AI, to address potential negative consequences, even if AI may improve business efficiency, save resources and facilitate work processes.

2.10 INNOVATION ADOPTION IN COMPANIES

The term "new technologies" refers to any method or tool that provides a substantial enhancement, either in terms of increased productivity or cost savings, compared to the existing technology for a particular process (Dymitrowski & Mielcarek, 2021). Currently, SMEs search for ways to stand out in the marketplace and compete with larger companies, and because of this, they are ready to implement new technologies (Peltier, Zhao & Schibrowsky, 2012). In addition, decision-makers within the company may be interested in adopting new technologies within the business for different reasons (Peltier, Zhao & Schibrowsky, 2012). According to Peltier, Zhao and Schibrowsky (2012), decision-makers in companies are ready to implement new technologies within their businesses due to their character traits and desires to make more money (Peltier, Zhao & Schibrowsky, 2012). Other reasons include social influence, the usefulness of the technology, environmental factors such as market changes, costs of new technology, ability to gain new customers and increase conversion rates, positive attitude towards change, and age (as young business owners are keen to adopt new technologies), intelligence (intelligent founders are more likely to adopt new technologies), education (founders who have university educated are more likely to adopt new technologies within their business), and finally, environmental turbulence (Peltier, Zhao & Schibrowsky, 2012). Other authors suggest that the decision to adopt new technologies within the company can be influenced by experimentation, complexity, compatibility, network externalities, competitive pressure, production chain, government regulations, risk management, company reputation, internal social network, external social network (Nemoto, Vasconcellos & Nelson, 2010).

To conclude, scientific papers show that new technologies within businesses can be adopted due to different factors, but mainly due to decision makers' characteristics, environmental factors, company size, competitive advantage, and cost.

Ultimately, the literature review comprehensively shows how AI technology, marketing and adoption have been built. Out of this review, a gap in the research can be identified, leading to the research question of this paper.

2.11 RESEARCH PROBLEM AND QUESTION

AI is a technology that is evolving rapidly, and recent advances in research have examined different use cases and effects AI can have in business cases (Mishra, 2021; Phatak, Wieland, Vempala, Volkmar. & Memmert, 2021; Maheswaran, Kaur, Pankajam, Firos, Vashistha, Tripathi & Mohammed, 2022). AI is also a very versatile technology, and research has covered many use cases of AI to understand how it can be applied to a commercial purpose in industries (Dong, Zhang, Zhu & Sun, 2021; Dudnik, Vasiljeva, Kuznetsov, Podzorova, Nikolaeva, Vatutina, Khomenko & Ivleva, 2021; Laaziz, 2020). One of these use cases of AI that have been gaining more and more attention is how AI can be applied to marketing efforts (D'Arco, Lo Presti, Marino & Resciniti, 2019). Today's research regarding AI and marketing has examined essential areas, like how AI can process big data from the customer journey to understand the process better and make effective decisions (D'Arco et al. 2019). In a literature study by Haleem et al. (2022), a general picture of how AI can be used in the area of marketing was made, and suggestions of which type of tools would be helpful were discussed. Similar insights concerning the general use and potential purpose of AI in marketing, using literature, have also been made in a study by Davenport et al. (2020). These two studies give a good general picture of AI and its use cases, as well as being able to distil much literature into a clear context. Although, they have not collected any primary data on how AI is actually applied today. AI tools often need to be specialised in order to give the most accurate performance to the task at hand (Haleem et al. 2022). In a study by Chatterjee, Ghosh, Chaudhuri & Nguyen (2019), they examined how AI may be applied in a specific use case like CRM. This study is an excellent example of understanding AI technology's more applied and specific use case. However, it does not examine how AI could be applied and leveraged through entrepreneurial marketing, which may benefit from using less intellectual labour than other companies using conventional marketing.

More and more companies are starting to move towards a digital business model, which opens up many marketing opportunities and forces the digitalisation of marketing to evolve (Hull, Hung, Hair, Perotti & DeMartino, 2007). Literature has been examining how digital content marketing can be improved by AI and literature on the customer journey as well (Bakhtieva, 2017; Kose & Sert, 2017).

However, there is currently a limited understanding of how AI is currently being leveraged by companies for entrepreneurial marketing and how AI tools are adopted by users to improve their customer journey when applied to online content marketing. Marketing is a significant and crucial challenge that many companies face and can be a vital component of their survival, pushing companies to use innovative marketing solutions (Sevilla-Bernardo, Sanchez-Robles & Herrador-Alcaide, 2022).

2.12 AIM OF THE STUDY

This study aims to investigate how AI-based content marketing tools are adopted and can benefit companies. For example, it has been shown that new AI tools can significantly impact digital marketing efforts (Rizvanović et al. 2023). AI tools can improve the efficiency and effectiveness of startup marketing campaigns and save resources (Kose & Sert, 2017). This thesis aims to investigate how AI tools are adopted into content marketing efforts in European companies and interview marketing decision-makers within the company to understand their strategy, what AI tools they use to improve marketing campaigns, and whether they use the latest technologies to improve the company's efficiency. Additionally, this thesis aims to contribute to the body of literature and share theoretical and practical insights into what affects the adoption process of new technology like AI.

3 METHODOLOGY

The qualitative method of this thesis is described in the following part as well as how the methodology has been designed.

3.1 RESEARCH DESIGN

This thesis aims to employ a two-phase design where qualitative literature study is integrated with qualitative exploratory interviews. The structure of the research design in this thesis was inspired by a similar research model that was made in an article by Rusthollkarhu, Toukola, Aarikka-Stenroos, and Mahlamäki (2022), where the authors combined empirical and theoretical data collection to draw common themes and conclusions to answer their research question. This thesis aims to have a similar approach when structuring the methodology since it was successfully applied in a similar study Rusthollkarhu et al. (2022). To design a method that was able to answer the research question, two types of data collection were made in sequence. In the first phase, theoretical data was first collected in the form of a parallel literature review, and in the second empirical data was collected in the form of qualitative interviews. The literature reviews identified key themes regarding the use of AI in online content marketing and acted as the foundation where interview questions could be made to explore AI adoption within companies.

Rogers' Innovation Diffusion Theory was selected for this thesis to be the describing theory of technology adoption since it's a broad and commonly used theory to understand the diffusion of innovation (Dearing & Cox, 2018). Rogers' Innovation Diffusion Theory is a theoretical framework widely used when studying the diffusion of innovation, new ideas or products in society (Dearing & Cox, 2018). The theory was developed by Everett Rogers in 1962 and described how new ideas, products and technology are adopted in society over time. The theory proposes that the adoption rate is affected by several factors, such as the characteristics of the innovation, the communication channels used to promote it and the characteristics of the adopters (Rogers, 1983). The theory can be used to understand the adoption of AI tools in online content marketing with a focus on three primary constructs:

Innovation characteristics, with a focus on the advantages and disadvantages of using AI tools in content marketing

- Adopter characteristics, focusing on the demographics, behavioural and psychographic characteristics of the company who are the early adopters of the new AI technology and how these influences affect their decision-making process.
- Communication channels focus on how the benefits of new AI tools are communicated to companies and how the information they choose to rely on when making decisions about technology adoption.

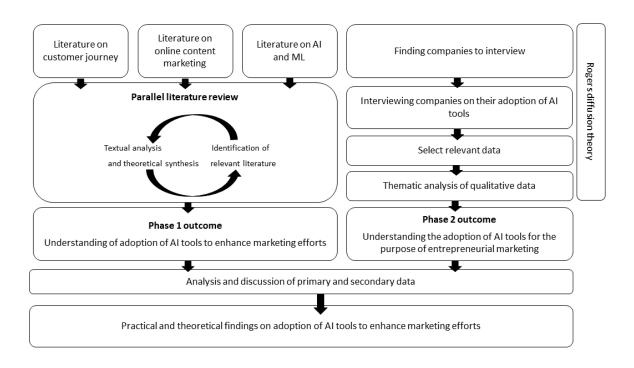


Figure 1. Research design modelled from Rusthollkarhu et al. (2022)

3.2 DATA COLLECTION

The collection of data is divided into two different phases where the first is based on secondary data from a literature study, and the second is based on qualitative interviews that are exploratory based. A parallel literature review was made in phase one regarding AI to provide a broad overview of the literature and then investigate further by analyzing and synthesizing multiple studies to gain a deeper insight into the topics of content marketing, customer journey and relevant subjects. In the second phase, qualitative interviews are performed in order to build an understanding of how AI tools are integrated into companies to enhance efforts within marketing and understand how AI

tools are used for the customer journey in B2B and B2C contexts. B2B and B2C context was chosen due to limited time.

3.2.1 Secondary data collection: literature study

According to Pederson, Vingilis, Wickens and Koval (2020), secondary data refers to data collected by an external person other than the paper's authors and used for an additional purpose other than its intended purpose. The pros of using secondary data are usually the high availability of information that has been collected in previous studies, which can make significant contributions and perspectives to new studies (Pederson et al., 2020). However, it is essential to remember that secondary data may not be able to provide all the information needed to answer a specific research question and may need to be supplemented with primary data (Pederson et al., 2020).

According to Snyder (2019), the purpose of a literature review is to identify all the empirical evidence of a specific topic to be able to ensure that all the available evidence is considered when answering a research question. This approach of conducting a literature review provides an overview of the subject and is a suitable method to minimize bias and enables findings and conclusions from the study to be drawn reliably (Snyder, 2019).

For the purpose of the parallel literature review in this thesis, secondary data will be collected by clearly defining the research question, relevant keywords and search terms. Then a comprehensive search of peer-reviewed articles was made through databases from sources such as Google Scholar, Scopus and ProQuest. Selected studies were screened by their tiles and abstracts to determine each study's relevance relative to the thesis' research problem and inclusion criteria. The studies' quality was evaluated using tools such as the Joanna Briggs Institute Critical Appraisal. The findings were then synthesized in order to draw conclusions about subject matters regarding the impact of AI tools on content marketing. The prerequisite for primary data collection and interview questions was built based on the secondary data collected.

3.2.2 Primary data collection: interviews

Explorative qualitative interviews were chosen instead of surveys to get more accurate data (Saunders, Lewis & Thornhill, 2019). The process of conducting interviews involves asking questions and collecting responses from research participants. Research interviews can have different forms, and interviews can be conducted individually or in groups where multiple people are interviewed at the same time (Jamshed, 2014). In-person or group interviews can be conducted via online platforms like Zoom, Teams and Google Meet. For this thesis, in-person interviews were carried out via the Google Meet platform and in-person. The interviews were performed by asking open-ended questions in order to encourage interviewees to share their points of view and experiences.

Interviews can be categorized into three types: structured, semi-structured, or unstructured (Adhabi & Anozie, 2017). In this particular thesis, the interviews were carried out using the semi-structured method. Semi-structured interviews were chosen since it is a flexible approach that ensures that various subjects during the interview are captured without missing any essential details (Zeigler-Hill & Shackelford, 2020). The authors of this thesis used prepared questions for interviews that were deducted from phase one of the thesis, and responders had some pliability to answer asked questions due to the nature of the research method (Bryman & Bell, 2015).

According to Saunders et al. (2019), responders during personal interviews provide informative data that can be used for primary data collection. The use of interviews will provide the authors with comprehensive data to evaluate the influence of AI on content marketing and customer journey within the company. Given the topic of AI and marketing, individuals who are potential interviewees are likely comfortable and familiar with technology, and online sampling has been proven to be a practical approach when sampling interviewees (Haase, Zweigenthal & Müller, 2022). This makes online sampling a suitable method for reaching out to interviewees, and the authors of this thesis managed to find enough interviews via LinkedIn search, Slack chat community, friends and startup accelerators (Moser & Korstjens, 2018). The interviews were scheduled with 12 companies' decision-makers. All interviewees were familiar with entrepreneurial marketing and were involved in either the startup ecosystems, business

development, or other executive roles within the company. The selection of participants aimed to build a broad and diverse perspective on adopting and utilising AI tools in entrepreneurial marketing. The interviewees were chosen from various sectors, roles and company sizes to build a general understanding of how AI tools are adopted and which motivations are associated with incorporating AI in marketing strategies. Including participants from multiple sectors made it possible to ensure a comprehensive understanding of their unique requirements for AI integration. The selection also considered the company's size and age to account for variations in resources and maturity. Participants were also chosen based on their target market, which comprises a wide range of demographics. The aim of including participants with various target markets was to understand how specific marketing needs and opportunities can affect how AI tools are leveraged. Interview participants were chosen based on three criterias: participants needed to have an entrepreneurial background, they needed to be from Europe, and their company needed to be at least 1 year old. Interviews were done digitally and physically. Audio recordings were taken during all the interviews to get all the necessary information since it was recommended by Saunders, Lewis and Thornhill (2016). Both thesis authors were present in all the interviews to understand how AI tools and content marketing are leveraged in different companies. Interviews were set on specific days and times due to participants' availability. Additionally, some of the meetings were rescheduled due to unforeseen reasons.

Table 1. Participants' background information

Participant	Sector	Role	Number of employees	Time established	Target market B2B/B2C
A	Medical	Business Developer	Six	~6 years	Athletes/people with heart issues/hospitals/sport centres.
В	Cleaning service	CEO	One	~3 years	Wealthy middle-aged individuals, small/middle enterprises.

С	Software as a Service	Head of Analytics	Three	<1 year	Middle-size companies.
D	Cosmetics	Head of social media	~300	~100 years	Middle-aged adults.
E	Food	CEO	Four	<2.5 years	20-30 years old individuals.
F	Writing	CEO	One	<2 years	Non-profit organisations.
G	Software as a Service	СМО	Two	<1 year	Communication s experts.
Н	Marketing	СМО	Six	~ 13 years	Companies owners.
I	Software as a Service	СМО	Four	<1 year	Customer who wants to build a website.
J	Luminaires lamps	СТО	Two	2 years	Restaurants, catering, Hospitals.
K	Prepping	CEO	One	5 years	Swedish families.
L	Consulting	CEO	One	14 years	Business leaders.

3.3 DATA ANALYSIS

This thesis intends to build a comprehension of the views and opinions of how companies adopt AI tools to enhance content marketing efforts. Therefore, analysing the primary qualitative data generated with thematic analysis was deemed appropriate. Thematic analysis is an appropriate method for data analysis since it is flexible but still allows for a detailed analysis enough to build a deep understanding of the subject, in this case: how AI tools are adopted by companies for the purpose of marketing (Nowell, Norris, White & Moules, 2017). Thematic analysis has been successfully applied to find themes in interview transcripts through an inductive approach in relation to answering research questions related to marketing (Chirila, Antohe, Isar, Panaitescu, & Malpass, 2023; Douglas, Hamilton & Grubs, 2009). Thematic analysis was also successfully used in a study by Gupta, Modgil, Choi, Kumar, and Antony (2023), where they explored how AI can improve companies' supply chains by conducting semi-structured interviews with a similar approach to this thesis. Thematic analysis for this scientific paper was chosen instead of content analysis since content analysis can be limited in interpreting data in a way that accounts for context (Elo, Kääriäinen, Kanste, Pölkki, Utriainen, & Kyngäs, 2014). The semi-structured interview questions were adjusted between interviews to accommodate the findings made during the primary data collection process, suggesting adjustments should be made (Zeigler-Hill & Shackelford, 2020).

Thematic analysis is a flexible method that is able to adapt to different types of data, including focus groups, large amounts of text and interviews (Lester, Cho & Lochmiller, 2020).

According to Lester, Cho and Lochmiller (2020), thematic analysis is commonly divided into seven phases:

- 1. Preparing data for analysis organising the data, familiarizing and building an understanding of the data through reading and identifying initial impressions or ideas.
- 2. Transcribing data generating initial codes by identifying and labelling important features, patterns or ideas in the data related to the research question.
- 3. Building familiarity with the data searching for themes by reviewing codes and grouping them into themes, which may connect multiple codes.

- 4. Reviewing data reviewing the identified themes and refining by potentially adjusting or merging several themes as needed to ensure accurate content data capture.
- 5. Coding data Here, each theme is defined, appropriately named, and data is coded.
- 6. A report is written, which involves writing the analysis, including a description of the research question, the method used, and the results of the thematic analysis, which may include quotes incorporated in the text as exemplified from the data.
- 7. Make the analytical method transparent where it is clear how the process of moving from codes to categories to themes is; mapping this process makes it possible to support the evaluation process for outside evaluators. An approach to achieve this may be to present an audit trail where a few segments of data related to the codes they apply are clear. This approach highlights that the researcher's interpretation and coding process is clear to an evaluator, and this builds trustworthiness in relation to the interpretations made of the data set.

The interview audio was recorded and then transcribed into text in a document. The transcripts were then analysed, and seven themes related to the RQ were identified. An inductive coding scheme was made since it allows for a flexible way to uncover new themes in opposition to deductive, which may limit the exploration of new insights and could limit the potential to discover new insights (Vaismoradi, Turunen & Bondas, 2013). Each theme was assigned a colour, and the text was then coded by highlighting relevant text in the transcripts to correspond with each theme. Since there is a risk in content analyses when only counting the frequency of codes of the missing context of the text, requiring themes were coded in the text instead (Vaismoradi, Turunen & Bondas, 2013). The themes were then analysed and interpreted to build a comprehensive understanding of the data related to the RQ.

3.4 LIMITATIONS

Every study has some limitations, and researchers must consider them. The authors of this study acknowledge several limitations resulting from constraints in terms of time and resources. The researchers need to take into account specific constraints when carrying out their study

3.4.1 Qualitative Research

A combination of iterative techniques and qualitative research methods has been selected for this research. The selected methods would enable the researchers to create various perspectives on AI integration in European companies' content marketing strategies and identify potential AI tools to enhance these marketing efforts (Rusthollkarhu et al. 2022).

Even though qualitative data collection in the form of interviews may provide in-depth information tailored to answer a specific research question, there are limitations to this approach. When conducting the interview, it is essential to consider the interviewee's bias, which can result from factors such as demographic and cultural background (Doody & Noonan, 2013). There are also social factors that may limit the validity of the data collection, such as then the interviewee wanting to create a good impression, having the desire to please the researcher by saying what they think will fulfil their wishes and also having the tendency to say something rather than nothing when they cannot answer a question of a particular topic (Doody & Noonan, 2013). According to Doody and Noonan (2013), another limitation of conducting semi-structured interviews can be the novel experience of the researchers, causing them to be unable to identify when to ask a prompt question or probe a response from the interviewee, and some relevant research data may be missed. In order to adequately address the research question, the number of companies that were interviewed had to be restricted to 12. This may be considered a small amount and could limit the study's ability to draw conclusive findings. This may also result in difficulties when generalising the qualitative research to be consistent over different populations and contexts (Baldwin, Pingault, Schoeler, Sallis, & Munafò, 2022). The data is therefore limited regarding which research question it may be able to answer. There is also a risk that the researcher's personal bias affects the selection of interviews to interviews (Galdas, 2017). According to Galdas (2017), this can be mitigated by using standardised interview protocols to ensure that interviewees are asked similar questions and reflexivity to reflect on the researcher's biases and assumptions.

3.4.2 Primary Data Collection

The research team employed the method of convenience sampling to choose the interviewees. This technique involves the selection of participants who can be easily accessed within the researcher's network and who fulfil the particular criteria specified by Robinson (2014). The participants were selected based on their convenience and appropriateness for the study. The occurrence of observer bias is due to the fact that the samples are selected based on availability rather than equal probability, as noted by Nagappan (2001). To increase the replicability of the research, selecting interviewees based on specific criteria is recommended. The researchers highlighted specific interview criteria, interviewees needed to be based in Europe and be in decision-making positions within marketing in the company. Moreover, the researchers found different interview biases that can not be fully controlled, which are related to interviewees' locations, age, gender, social background, and sample size due to the fact that some of the companies were already known by the researchers but by diversifying the sample group as much as possible to ensure that the data represents a wide range of backgrounds and characteristics was represented (Robinson, 2014). Additionally, the time limit of interviews limited researchers to acquire more in-depth answers.

3.4.3 Secondary Data Collection

Primary data collected by external researchers in other studies to answer a specific research question becomes secondary when applied to another study or research question (Allen, 2017). The perk of this data collection method is the high quantity available in online sources, but quantity is not always synonymous with appropriateness (Allen, 2017). When collecting secondary data, there may be a risk of bias in selecting studies and literature. This can occur when researchers actively collecting secondary data in the form of literature to answer their research questions unconsciously choose literature or secondary data that supports the hypothesis without taking context factors such as region, the study age and such (Allen, 2017). There may also be a lack of data quality that the researchers need to take into consideration when selecting secondary data. In order to counteract the limitations of secondary data available on the selected subject, primary data was collected, and the search for information expanded in the cases when needed, examples of expanding the sources are using conference papers or datasets from the industry (Baldwin et al.

2022). Countermeasures to mitigate personal bias when selecting literature were made in the form of defining clear selection criteria for selecting sources relevant to the research question (Baldwin et al. 2022).

3.4.4 Qualitative thematic analysis

Thematic analysis is a flexible method that allows researchers to analyze data and find patterns or themes across qualitative data (Nowell et al. 2017). One limitation of thematic analysis is that the flexibility may cause inconsistency when interpreting the data, which may lead to a lack of coherence when developing themes, according to Nowell et al. (2017). Also, thematic analysis does not allow researchers to make statements about how language is used in a particular context, limiting any claims regarding language use (Nowell et al. 2017). It is also argued that thematic analysis and the lack of substantial literature on thematic analysis compared to other analysis methods may cause less experienced researchers to be less confident in implementing it in a comprehensive manner (Nowell et al. 2017). A human factor also plays a role where limitations in the knowledge of researchers and personal bias may affect what data is included to build themes (Braun & Clarke, 2023). It may also be challenging to generalise any findings for other studies since the amount of data often is limited (Nowell et al. 2017). The limitations were mitigated by triangulating data from multiple sources and peer debriefing to improve the analysis's credibility (Nowell et al. 2017).

3.5 ETHICAL CONSIDERATIONS

The authors of this master's thesis carefully followed the ethical guidelines for all the interviews. For this master thesis, Bell, Bryman and Harley (2022) ethical standards were used to ensure the quality and honesty of this study. Each interview question was developed according to ethical guidelines to avoid misunderstandings during the interview. Before the interviews, every interviewer was introduced to ethical guidelines to keep it professional and confidential. In addition, before taking the interview, the interview participants were informed about the ethical sound recording. The authors of the thesis agreed not to use any interview information for their own benefit.

Before the interviews, interview questions were revised by the thesis supervisor to avoid misunderstanding and ethical harm. During the interviews, responders were only asked questions that were relevant to the research topic; any personal questions were not asked to remain professional. These thesis authors did not make up any data, remained professional during the whole thesis work and followed university writing rules. The researchers took all the required measurements to ensure data safety and thanked participants at the end of every interview.

3.6 TRANSCRIBING

The identity of the interviewees was written down. During the interviews, single questions were asked to get a precise answer, and interview questions were repeated if interviews asked them to be repeated to get a clear answer. Additionally, the participants' job titles, company sectors, number of employees, time established, and target market of companies were recorded.

Several AI tools were used for text transcription; after that, transcribed text was improved by hand and revised by the two researchers to ensure it quality (Fireflies.Ai, 2023; Otter.Ai, 2023; Trint, 2023). The researchers of the study had an opportunity to delete transcribed text parts that were irrelevant or hard to understand. This approach allowed researchers to get the most precise and relevant data. Additionally, the collected data were read and corrected several times in succession to produce more sophisticated results.

4 FINDINGS AND ANALYSIS

4.1 Introduction

The structure of the results section consists of three sections. Sections include research questions, an explanation of chosen themes, and the main findings about chosen themes. The research question was: What factors affect the adoption of AI tools in entrepreneurial content marketing efforts at European companies, and which specific AI tools are utilized for this purpose?

The development of themes in this study followed a systemic process of thematic analysis, and by building a general understanding of the interview data, initial codes were made to identify preliminary themes that later, through iterative discussion and careful review, were refined. Seven themes were made to represent the data accurately. This approach was conducted to ensure the credibility of the findings to provide deeper insights into the data. The findings were separated into seven clear themes using inductive thematic analysis. All seven themes were relevant to the research question. The themes included:

Table 2. Main themes connected to participant quotes

Theme	Quote	
Variables affecting tech and AI adoption -	Participant B: "I came from Aviation and	
what leads to the adoption of technology in the	Business Administration. I also worked in	
company?	startups before. And yeah, maybe that's why	
	I'm not afraid of technology compared to other	
	cleaning companies"	
	Participant L: "Like some of my clients, unfortunately, are a little bit behind on tech. And that's also why they need me because their clients and their target audience are not behind on tech"	

	Participant C: "I was influenced because of their inefficiencies and their deficiencies in adopting new technology, and that motivated me to literally change my career. So I think it's the pathway to technology and the advent of like just new ideas and you know evolving that was really influenced by tech technology like that"
Negative aspects of AI - what are the main negatives associated with AI tools? Both in business and in general.	Participant D: "We will all gonna lose jobs" Participant C: "I think it gives you a big tool to use when it comes to generating malicious content" Participant F: "I'm very concerned about ethics and copyrights"
Content marketing - which content marketing strategies do the interviewees use and how do they use AI to enhance these efforts?	Participant A: "So that would be the next step because that actually allows for you to be able to put out more" Participant I: "I've used it to create blog posts so far" Participant G: "All our marketing has been free marketing, and it works. So we're not going to pay for anything just yet"
AI tools - artificial intelligence tools that interview use within their business.	Participant J: "I was able to be of assistance that would be grammatically correct or help

me improve my vocabulary because this is a text based model" Participant E: "So I just created an Avatar look-alike image, and then I use DALL·E" Participant G: "I like copy.ai; its output is better, versus potentially just using ChatGPT" Participant L: "I don't have that many viewers Customer journey - what does the customer journey look like in a business setting? on a webinar, but those few people, they convert" Participant F: "I have my own website. I use some keywords. So they find me on Google or they contact me through my website. And the other way is that I also post on LinkedIn and they contact me via LinkedIn" "We are reaching our Participant B: customers through Facebook tools" AI benefits/effects on the business - how AI Participant I: "Give me ten ideas of good social tools benefit the business and how these tools media marketing strategies, and I can use affect it. whatever I want out of it" Participant A: "You're able to reach out to specific customer groups without conducting a large amount of validation" Participant L said: "So my opinion is, if you can help me gather stuff so that I can actually do

	my work faster, better, more efficiently, by all means, bring it in"
Challenges in marketing - the challenges that	Participant G: "There's a lot of noise out there
interviewees face in creating content for	and it's hard to stand out in the crowd. So,
marketing purposes.	unless you already have a strong following, it's
	hard to create something that's going to cut
	through"
	Participant F: "sometimes it just difficult to
	target one specific niche"
	Participant A: "I think right now it is the
	conversion rate, which is, uh, which is the
	problem"

All seven themes relate to the research question.

The interviewees in the interviews have been named as participants from A-L to make the text easier to read and to make it easier to understand the main findings and get new insights.

4.1.1 Theme 1 - Variables affecting tech and AI adoption - what leads to the adoption of technology in the company?

All participants except Participant K had a technical background with experience in adopting new technology, which they attributed to their current ease of adopting new tools. Participant B described how his background gave him a competitive advantage: "I came from Aviation and Business Administration. I also worked in startups before. And yeah, maybe that's why I'm not afraid of technology compared to other cleaning companies.". Another participant C had previously worked in a corporate and slow-moving work environment where technology adoption was very inefficient, and this inspired him to be more adaptive and fast: "I was influenced because of their inefficiencies and their deficiencies in adopting new technology, and that motivated me to literally change my career. So I think it's the pathway to technology and the advent of like just new

L stated that she thought companies saw adopting new technology as an exciting opportunity or a must to stay competitive. Participant L described her work together with her clients: "Like some of my clients, unfortunately, are a little bit behind on tech. And that's also why they need me because their clients and their target audience are not behind on tech". Participant L would also state that she would only adopt new technology if there were a clear added benefit compared to her current solutions since she would prefer not to implement a new system otherwise.

The motivation of most participants was to adopt new technology into their company to save time and money and become more efficient. Participant E even stated curiosity as a motivation to test new technology. Participant C was motivated to adopt new technology in order to stay relevant in the market, claiming that startups need to continue to build, measure, learn and adapt through pivoting. Participant B also stresses the need to be able to communicate the usage of new technology in a company to avoid frustration in teams. Participant C states that it can be costly to spend a lot of time to integrate new technology that may not pay off and that it needs to be an evaluation of the technology's potential. Participant C also states that there needs to be clear communication within the team in order to avoid uneven technology adoption.

Another common theme discussed by the participants that would hinder them from adopting new technology is the price, functionality, user-friendliness, and time required to learn, as significant barriers to implementation.

4.1.2 Theme 2 – Negative aspects of AI - what are the main negatives associated with AI tools? Both in business and in general.

The participants reported various negative aspects of AI. Most participants were concerned about AI's negatives within business and society. Participant B identified only a few negative concerns regarding AI. Participants A and H expressed concern that humans may become dependent on AI tools. Furthermore, participant A mentioned that AI tools can be misleading and do not understand the whole picture of a task.

Moreover, participant A mentioned that AI could negatively affect humans critically; for example, it will hinder people's ability to think critically. Lastly, participant A mentioned that AI tools could

make mistakes like humans. Participants B and E mentioned that AI bots are only trained on English data and, therefore, are limited when applied to other languages.

Participants C and H mentioned that AI tools could generate malicious content that can be harmful to society, as Participant C stated: "I think it gives you a big tool to use when it comes to generating malicious content". Participant C also identified that AI might distort human intelligence by creating new technologies that can be implanted in the human body.

Participants D, F, H, C and E mentioned that they fear people will lose their jobs due to AI tools, as Participant D stated: "we will all gonna lose jobs". Participant D mentioned that AI technologies would reduce human creativity. In addition, participant C stated that AI would distort people's reality to such an extent that it would affect their mental health. Furthermore, participant D mentioned that AI tools could affect people's ability to socialize: "And we're not into the real world anymore, especially with VR, like people create worlds. It's like, super cool. But I feel like we're getting a bit too far away from the actual world we're in". Participant E stated that AI could not use clear reasoning. Neither could it hold the conversation expected, and it requires much learning to understand how to prompt it correctly. Lastly, participant E also mentioned that humans can become dependent on AI.

Participant F identified AI negatives related to ethics, copyrights, human discrimination, and the responsible use of AI: "I'm very concerned about ethics and copyrights". Participant L added that AI use could be an unethical way of producing content if the AI used is not credited. Participants G and L mentioned that AI-generated content could be misleading and hard to trust. Participants I and H identified that AI tools could negatively affect Google's ranking system and cause flagging for information spam. Participant J suggests that AI tools are challenging to understand due to the speed of innovation and testing. When the market is flooded with new AI tools, it can cause problems for people because they will no longer know what tools to use. To add further, as a negative, Participant J stated that AI tools cannot provide a "human experience" compared to interacting with people. Participant H mentioned that they are concerned about fraud and ethics.

4.1.3 Theme 3 - Content marketing - how participants use AI for content marketing within their businesses.

The participants reported various content marketing methods, and depending on the context of the target market, participants would use different content marketing strategies. A pattern of social media used by several participants was channels like Instagram, Reddit, Facebook, TikTok, and LinkedIn. Several companies also mentioned blog/article posts for SEO ranking, email marketing, and copywriting as use cases for AI. An everyday use of AI applied to content marketing by the companies interviewed was leveraging AI to generate text for articles for SEO. Regarding her use of ChatGPT, Participant I stated: "I've used it to create blog posts so far". Participant I then stated she makes sure to rewrite the text via promoting or an external AI tool. Another text generation purpose was to write a post on social media like LinkedIn.

Both paid, and free advertising strategies were stated by several Participants. Forms of paid advertising were mainly Google ads and Facebook ads. The approach of paid and free advertising could vary among the participants. Participant I stated that they use a mix of paid and free advertising, while Participant G stated that they focused on only using free advertising strategies: "all our marketing has been free marketing, and it works. So we're not going to pay for anything just yet."

A more specific use of AI in content marketing was, for example, when participant A would use ChatGPT to create messages to send to prospects. He did this by feeding the AI with information about the prospect. Participant A would then write a prompt for the AI to write a cold-approach message based on the prospect's background.

Some participants are aware of other use cases to generate content for marketing, such as image generation. However, Participant A stated: "So that would be the next step because that actually allows for you to be able to put out more".

4.1.4 Theme 4 - AI tools - artificial intelligence tools that interviewees use within their businesses.

All of the participants, except Participant K, used AI tools in their businesses. All participants were aware of AI tools. Most participants mainly used ChatGPT within their business, as Participant D stated: "I'm only familiar with ChatGPT". Company E identified many more AI tools, for

example, Adobe Podcast AI, OpenAI, DALL·E: "So I just created an Avatar look-alike image, and then I use DALL: E". Participant G stated that he uses copy.ai, AutoGPT and ChatGPT: "I like copy.ai; its output is better, versus potentially just using ChatGPT". Participant J mentioned that he uses Grammarly: "It was able to be of assistance, it would grammatically correct or help me improve my vocabulary because this is a text-based model". Participant H mentioned that it uses Jasper.ai, Surferseo, Zapier AI, make.com, and Nifty: "We use Nifty, which is like Slack". Participant A mentioned that he uses Motion.ai and Grammarly. Participants learned about AI tools from social media (LinkedIn, Facebook, Instagram, Twitter, Tiktok), friends, television, and school. All Participants, except Participant K, mainly used ChatGPT for social media content generation, text analysis, copywriting, SEO, website content, website building, and CV building. Other tools identified from the interviews were used for data analysis, design, photoshop, content optimization, logo creation, brand colour creation, business ideas testing, optimisation of business, customer personas building, video generation, image generation, finance calculations, prompt writing, and Facebook ads. The majority of interviewed participants no longer see a future without AI tools, as they bring significant benefits to businesses. They predict that more and more businesses will use AI tools soon. Lastly, the majority of interviewed participants, except Participant K, mentioned that they would like to integrate more AI tools into their businesses. However, they do not have the time required to adopt new tools yet. They stated that the competition within AI is quick, so most companies do not have time to adapt to the newly emerging tools, except for a few exceptions.

Table 3. Names, function and benefits of AI tools

Name of AI-tool	Function	Benefits
ChatGPT	An AI chatbot that uses natural language processing to create humanlike conversational dialogue.	Improves efficiency, saves money and resources within the company
Adobe Podcast AI	To analyse podcast audio and generate transcripts, captions, keywords, summaries, and more.	Helps with content creation

DALL·E	To generate digital images from natural language descriptions.	Helps with image creation to avoid plagiarism
Jasper.ai	To generate high-quality copy for emails, ads, websites, listings, blogs & more.	Helps with email, ads, content generation, etc.
Surferseo	To analyse the company page against the top-ranking pages and provides the company with SEO recommendations.	Helps with SEO optimization.
Zapier AI	To connect AI by Zapier with thousands of the most popular apps.	Helps to automate work and save time.
make.com	To allow companies to visually create, build, and automate workflows.	Helps to execute tasks and automate workflows.
Nifty	To organise, plan and prioritise work.	Helps with planning work within the company.
Motion.ai	To keep track of schedules, recurring tasks, and meetings.	Helps with time management.
Grammarly	To provide grammar and spell checking, plagiarism detection services, and suggestions about writing clarity, concision, vocabulary, style, and tone.	Helps with writing.
AutoGPT	To assess its work, improve upon past experiences, and leverage its history to generate more precise results.	Helps with text generation and coding.
copy.ai	To create texts, copywriting, or articles in a natural writing style	Helps with content generation, etc.

4.1.5 Theme 5 - Customer journey - how does the customer journey look like in a business setting?

When the participants described their customer journey, a commonality was that the pre-purchase phase would often be built using some form of content marketing - paid or free. The participants used marketing channels like LinkedIn, Facebook, Instagram, Google ads and SEO. For example, participant F stated, "I have my own website. I use some keywords. So they find me on Google or they contact me through my website. And the other way is that I also post on LinkedIn and they contact me via LinkedIn." Moreover, Participant B stated that "We are reaching our customers through Facebook tools"; "We hand out fliers with all of our services and we add the other strategies Worth of Mouth, which is the best strategy for us." Although, this was not the case for all. Participant J would cold call his prospects in order to get initial contact and build awareness of his product. There could also be a mix of marketing channels, as described by Participant A, who would use content marketing but also reach out to customers via direct messages through LinkedIn. Participant L stated that she mainly used LinkedIn for marketing, contacting customers directly or indirectly via posted continent. She would also gain leads through word of mouth. Her customers would later be brought to a webinar and finally converted at her website. Participant L stated that this customer journey would yield a high conversion rate. Participant L stated: "I don't have that many viewers on a webinar, but those few people, they convert."

According to most participants, the purchasing phase would most commonly be performed at the website. Interestingly enough, the post-purchase phase was not mentioned by any of the participants.

4.1.6 Theme 6 - AI benefits/effects on the business - how do AI tools benefit companies, and what effect do these tools have?

Many participants stated variations of the benefits of implementing AI into their company and in their marketing efforts. Some of the central and commonly recurring benefits of implementing AI into the participant's businesses were becoming more efficient, idea creation and saving resources in the form of time and money. Participant A also stated that AI could support him when he was too tired to think. Participant A also stated that AI could be useful in finding a target audience and reaching out to them with custom content without needing a lot of validation work: "You're able

to reach out to specific customer groups without conducting a large amount of validation". Participant I utilised AI to get the thought process rolling, with one example being," Give me ten ideas of good social media marketing strategies, and I can use whatever I want out of it". Participant H would feed AI using machine learning prediction with user data to optimise when to send emails to customers. Participant H also mentioned that AI could generate text, and it is also possible to ask it to teach something related to the task which a person is trying to achieve and enhance their skills as a content generator. One example could be asking ChatGPT to correct grammar in a text, asking what it corrected, and asking for exercises to improve grammar. Participant L stated that she used AI to correct grammar, summarise books, and find information. Participant L said: "So my opinion is, if you can help me gather stuff so that I can actually do my work faster, better, more efficiently, by all means, bring it in"

ChatGPT was often described as quick, easy to learn, and intuitive. ChatGPT was also attributed by participants I and A to save time due to acquiring information faster than using Google. By using ChatGPT, participants did not need to sort out any information and would get it delivered to them directly.

4.1.7 Theme 7 - Challenges in marketing - challenges that interviewees face in creating content and marketing.

The participants identified Several challenges, one recurring theme being the difficulty in achieving a profitable conversion rate. This challenge was mentioned by participants A and K. For example, participant A stated: "I think right now it is the conversion rate, which is, uh, which is the problem." Participant B also noted that content marketing requires a significant amount of time and can be challenging to balance with other marketing tasks across various channels: "We don't have time to invest in it, because other tasks take so much time and we are small." Additionally, participant B complained about being targeted with recurring ads for cleaning services on Facebook, which was problematic because they were a producer rather than a consumer of such services. Participant B acknowledged the benefits of researching competitors by being shown their ads but was concerned that their own ad spending would be used in the same way for their competitors: "I understand that I'm showing my advertisement to my competitors. And, you know, it's it's it's actually a bad thing. I don't want my competitors to see my price as to see my service level or to see my content." Participant G stated one of the challenges in content marketing:

"there's a lot of noise out there and it's hard to probably stand out in the crowd. So unless you already have a strong following, it's hard to really create something that's going to cut through".

Several participants stated time-consuming challenges when producing content marketing. These challenges were analyzing large amounts of data to understand trends and then generating bite-sized content that is able to hook the attention of potential customers. Participant F stated that it can be difficult to target their customer when producing content marketing for LinkedIn: "Sometimes it is just difficult to target one specific niche".

5 DISCUSSION

5.1 Introduction

This study was qualitative and required analyzing interview data repeatedly to recognize patterns. Identified patterns were called: **Variables affecting tech and AI adoption, Negative aspects of AI, Content marketing, AI tools, Customer journey, AI benefits/effects on the business,** and **Challenges in marketing.** Discussion section headers are based on patterns found in the responses of the interviews. The results are presented using the same terms used by the participants. The next phase is to discuss the findings of this scientific study.

The research aimed to answer the research question: what factors affect the adoption of AI tools in entrepreneurial content marketing efforts at European companies, and which specific AI tools are utilized for this purpose?

The main findings showed that decision-makers within the company are motivated to adopt new technologies within the company due to their background, adaptiveness to new tech and the benefits of the technology that the company can obtain through adoption. In addition, other findings were that AI tools could improve business efficiency, save resources and that tools like ChatGPT, notion, copy.ai, are integrated into entrepreneurial content marketing within businesses. People responsible for marketing decision-making aim to understand AI tools to save time and get a competitive advantage in the marketplace. In addition, study participants identified that AI technology has many negatives and concerns and should be considered. The data collected agrees with the finding of D'Arco et al. (2019) that companies who adopt new technologies within their businesses have a higher chance of staying competitive in the marketplace in the future.

5.2 NEGATIVE ASPECTS OF AI

Tarafdar, Gupta and Turel (2013) identified that AI could cause job losses. The study's data support Tarafdar and others' findings that AI can potentially replace people's jobs and cause job loss in the near future. Furthermore, Wirtz, Weyerer and Sturm (2020) identified that AI could cause ethical concerns. The data from this scientific study agrees with Wirtz, Weyerer and Sturm's (2020) claims

that AI can potentially cause ethical concerns when it is used irresponsibly and without considering the consequences of the new technology.

Moreover, as stated by Tai (2020), the implementation of AI technology has the potential to bring about significant alterations to society, including the possibility of generating wealth inequality. Only one participant from our study agrees with Tai's statement, and every other participant suggests that business owners should learn about new technologies and adapt to them to stay competitive in the marketplace (Tai, 2020).

Furthermore, according to Mikalef et al. (2022), AI has the potential to cause data privacy violations, impede transparency in decision-making, allow unauthorised entry to confidential information, and even manipulate and disseminate biased data, leading to political or social polarization. Study findings agree with this statement, participants G, I, L, and F mentioned the same concerns as Mikalef et al. (2022).

Lastly, according to Grewal, Guha, Satornino and Schweiger (2021), AI can cause data security problems. The current study's empirical data reinforced the notion that AI can cause data security problems. Considering the scientific literature, it is necessary to understand that using AI tools in business can have benefits and disadvantages.

5.3 AI TOOLS

Haleem et al. (2022) identified that many AI tools had been created in recent years for commercial purposes. Meanwhile, Perifanis and Kitsios (2023) stated that AI tools could be used to save resources, time and process legal data. Study findings agree with this statement. Many participants in the study stated that AI tools within the business could be beneficial and help to save time, resources, and be used to stay innovative and competitive. Study participants identified five main AI tools for the customer journey, content generation, improving business processes and SEO. For example, ChatGPT, AutoGTP, copy.ai, Grammarly, and Jasper.ai.

5.4 CONTENT MARKETING

Kose and Sert (2017) identified that companies often use content marketing. The current study's findings agree that small and big companies widely use content marketing, and the main channels include Instagram, Facebook, TikTok, LinkedIn, Reddit, SEO content and traditional marketing channels.

Furthermore, Haleem et al. (2022) mentioned that AI will revolutionise content marketing. The data from this study agree with Abid Haleem's statement that AI will revolutionise content marketing. Participants from the study leveraged AI tools to create content on various platforms to increase awareness of their brand.

Moreover, Haleem et al. (2022) stated that AI could be applied within businesses to do marketing work faster. The data gathered from this study agrees with Haleem et al. (2022) statement that AI tools can improve marketing efforts. Participants from the study leveraged AI tools to write social media posts, emails, and SEO articles faster.

Lastly, Kose and Sert (2017) mentioned that AI tools could be used as a support tool within content marketing. Some study participants agree with Kose and Sert's (2017) statement. Study participants identified that they used Grammarly to improve their content quality and save time.

Ultimately, from the study findings, it is evident that incorporating content marketing into a company's marketing strategy is crucial for achieving success and acquiring new clients, as suggested by du Plessis (2022).

5.5 AI BENEFITS/EFFECTS ON THE BUSINESS

Rizvanović et al. (2023) identified that AI tools could be used within businesses to improve marketing efforts and give a competitive advantage in the marketplace. The current study's findings agree that AI tools can benefit the company's marketing efforts by making it more efficient, improving the quality of work and giving a competitive advantage in the marketplace compared to companies that do not use AI tools within their business.

Moreover, Haleem, Javaid, Qadri, Singh and Suman (2022) mentioned that AI technologies could be used for deeper customer insights and personalised marketing. Study findings agree with the statement. AI tools used wisely may help companies design specific customer personas and help with specific text generation.

In addition, Perifanis and Kitsios (2023) noted that AI tools within the business can help companies save resources and time. Current study findings agree with Perifanis and Kitsios's (2023) statement. Study participants used AI tools to save time and resources.

Lastly, Benbya, Pachidi and Jarvenpaa (2021) stated that not many companies use AI within their business nowadays. The data from this scientific study agrees with Benbya, Pachidi and Jarvenpaa's (2021) findings. Study participants identified that only a tiny percentage of businesses leverage AI to improve business results and that business owners need to leverage AI tools to get the most out of these new tools because these tools are beneficial.

5.6 VARIABLES AFFECTING ADOPTION OF TECHNOLOGY AND AI

Peltier, Zhao and Schibrowsky (2012) stated that small companies are ready to implement new technologies within their businesses to stay competitive in the marketplace. The study findings show that small companies are ready to implement new technologies within their businesses to stay competitive in the marketplace. This also aligns with Rogers's diffusion theory, as small companies can be considered early adopters within the diffusion process because they are willing to take higher risks and are more motivated to adopt new technology to gain a competitive advantage (Rogers, 1983).

Moreover, Peltier, Zhao and Schibrowsky (2012) mentioned that company owners are ready to implement new technologies within their business due to character traits, social influence, the usefulness of technology, environmental factors, positive attitude towards change, education, and costs of new technology. The data from this scientific study agrees with Peltier, Zhao and Schibrowsky's (2012) findings. Study participants identified the main influences that affected them to adopt new technologies within their businesses, and these influences included: character traits, background, technology effectiveness, education, and cheaper cost of new technologies. These

factors can be aligned with the diffusion process of advantage, compatibility, complexity, trialability, and observability (Rogers, 1983).

Furthermore, Nemoto, Vasconcellos and Nelson (2010), added that new technology adoption within the company can be affected by the personal qualities of the founders, environmental influences, organisational scope, competitive advantage, and expenses. Current study findings agree with the Nemoto, Vasconcellos and Nelson (2010) statement. One study participant identified that it is easier for small companies to adopt new technologies in comparison with large corporations. Other participants added that they were motivated to adopt new technologies to get a competitive advantage in the marketplace, save and improve business activities. These factors are consistent with Rogers's (1983) findings that characteristics such as cost, benefits, social factors and the perception of benefits play a role in adoption decisions.

5.7 CHALLENGES IN MARKETING

In this research, a number of participants reported that creating content marketing can be a time-consuming process with various obstacles to overcome. One such challenge involves analyzing vast amounts of data to identify trends and then producing short-form content that captures the interest of prospective customers. Because of these reasons, small business owners should pay attention to new technologies and how to use them in business. Rizvanović et al. (2023) state that stated challenges in the study could be overcome by adopting new technologies within the business. Ahmad, Musa and Harun (2016) add that content marketing creation can help companies with customer conversation and brand awareness. Moreover, Alareeni et al. (2022) state that new technology tools adoption within a business can benefit companies and help save resources. This shows that using new technology tools in business can help overcome the challenges within business marketing efforts and beyond.

5.8 CUSTOMER JOURNEY

According to Lemon and Verhoef (2016), the customer journey can be divided into several touch points and categorised into three phases: pre-purchase, purchase and post-purchase. Much of the content marketing mentioned by the participants relates to how they approach initial marketing contact with the customer in the pre-purchase phase. This may indicate that focus when building the CJ is directed towards this initial contact phase with the customer to bring attention to their value proposition. Some participants brought up the low conversion rate when using paid ads. This may also be a sign that there is an uneven focus since the purchase phase is often associated with converting customers. The participants also used ChatGPT as a copywriting or SEO tool, even though this would require the participant to rewrite it by hand or use an additional rewriting tool to publish the text without being tagged by Google as AI-written. There was almost no discussion or mention of post-purchase marketing. According to an article by Court et al. (2009), there needs to be a focus on the entire CJ and not only single touchpoints. When analysing the primary data generated in this thesis, it is possible to see a general theme of a single pre-purchase phase focus. This may indicate another uneven focus on the CJ and could cause lower retention of converted customers and unprofitable spending of time or money in the pre-purchase phase.

6 CONCLUSION

The conclusion summarises the outcomes of interviews with companies leading decision makers who provided insights on how they use AI tools within the company to improve content marketing efforts. Moreover, additional information will be provided on how research findings contribute to practical and theoretical implications. Lastly, the conclusion will give further guidance for future research.

6.1 Introduction

The study shows that company decision-makers are aware of new AI tools that can benefit company content marketing efforts. They usually do not have enough time to research new AI tools, which could improve entrepreneurial marketing efforts within the company, and sometimes they do not have enough resources to allocate towards new tools. However, new AI tools could be a massive help for company decision-making personnel to improve company efforts.

Answer to the research question:

RQ: What factors affect the adoption of AI tools in entrepreneurial content marketing efforts at European companies, and which specific AI tools are utilized for this purpose?

To answer the research question of what factors affect the adoption of AI tools in entrepreneurial content marketing efforts at European companies and which specific AI tools are utilized for this purpose: This thesis identified several factors affecting the adoption of AI and potential tools to enhance marketing efforts. According to the data collected, factors such as pricing, user-friendliness, background/previous experience, perceived advantages, barriers, and time/resources constraints affect the adoption of new technology like AI for the purposes of marketing.

In this scientific paper, the researchers identified potential AI tools companies use to improve content marketing efforts. These tools include ChatGPT, motion.ai, abode podcast AI, DAll-e, jasper.ai, Surfero, Zapier AI, make.com, Nifty, Grammarly, AutoGTP, copy.ai, and make.com. Companies within entrepreneurial marketing adopt these tools by implementing them within social media content creation, SEO optimization, ads creation, email writing, data management, grammar correction, brand communication, and sales optimization.

6.2 ADOPTION AND LEVERAGE OF AI TOOLS

This thesis discovered several patterns of how staff in leading decision positions of marketing would adopt new technology to enhance their entrepreneurial marketing efforts. The main motivators to adopt new technology included several perceived advantages, such as saving resources in the form of time and money and improving company efficiency. Integration of these tools also depended on the user-friendliness of the tools and the pricing.

The research conducted was also able to see a possible connection between technology adoption and the background of the user. A previous background in using novel technology may have contributed to adopting new AI tools. This finding may also be connected to the finding of limiting barriers such as non-intuitive design as to why some companies choose not to adopt novel technology, as this barrier may be perceived as more prevalent in novel tech users.

6.3 PRACTICAL IMPLICATIONS

This study has several practical implications that may be interesting from both user-centric and producer-centric perspectives.

6.3.1 User-centric

Based on the research findings of this thesis, it is possible to draw several practical implications from a user-centric perspective. Firstly, companies can leverage language models such as ChatGPT to generate and optimize social media and SEO content creation. Language models can generate new ideas for content creation, analyze data and create engaging content optimized for a target audience. Secondly, AI tools for email campaigns, such as Nifty and Zapier AI, can enhance email marketing efforts by automating segmentation, personalization, and scheduling tasks. This enables users to save time and resources while improving the effectiveness of the campaigns. Thirdly, AI text-generating tools such as Grammarly and Copy.ai can improve brand communication by ensuring consistent, error-free, engaging content. This can help companies to build trust with a target audience. Finally, image-generating tools such as DALL-e can be used to produce image content for social media and websites.

These AI tools can potentially enhance companies' marketing efforts by improving efficiency and saving resources.

6.3.2 Producer-centric

Research findings also indicate practical implications for companies that produce AI tools. Firstly, the findings indicate that the user-friendliness of the AI tool is an essential factor when it comes to adoption by users. Companies that produce AI tools must consider this factor when designing their interface and user experience design. Secondly, the findings also suggest that the pricing of AI tools is a crucial factor that is evaluated by users/customers before they decide to adopt the tool. Thirdly, findings indicate that the communication of benefits should be highlighted to increase efficiency and save resources such as time and money. Lastly, the study found that AI tools are most commonly integrated into social media creation, SEO optimization, ads creation, email writing, data analysis, grammar correction, brand communication and sales optimisations. Companies producing AI tools may use these findings to develop and market tools designed for these purposes.

Overall, the practical implications suggest that several factors can affect the adoption of AI tools, and by understanding these, companies can develop products that are more appealing to potential users and improve their marketing and communication strategies to promote adoption.

6.4 THEORETICAL IMPLICATION

This study's theoretical implications for the marketing and entrepreneurship field include the following. Firstly, the study highlights the importance of technology adoption in companies by examining the motivations and barriers to technology adoption. This study contributes to a better understanding of which factors may influence the adoption of new technology in entrepreneurial marketing. Secondly, the findings in the study provide insight into the specific use cases of AI tools in entrepreneurial marketing. By identifying in which areas these tools are used, the study is able to provide a better understanding of the potential impact of AI in different aspects of marketing. Thirdly, the study is able to highlight the role of AI tools as a driver of innovation in entrepreneurial marketing by examining the potential of these tools to enhance content marketing efforts. The study is able to contribute to a better understanding of how new technology can

motivate innovative practices in marketing. Lastly, the study may provide insights into a possible connection between technology adoption and previous experience with new technology that can influence the adoption of AI tools and other new technology.

Overall, the theoretical implications of this study suggest that several essential factors influence the adoption and use of AI tools in entrepreneurial marketing. By studying these factors, the study is able to contribute to a better understanding of what potential impact new technologies may have on entrepreneurial marketing and highlight potential factors that may influence the adoption of AI tools and other new technology.

6.5 POLITICAL IMPLICATIONS

This study's main focus was not to examine any political implications of AI, but from the literature study and interviews, it was possible to notice worries regarding losing jobs to AI as well as the question of how AI-generated content may or may not be watermarked in the future, to indicate its origin. This may affect the landscape of regulations in EU regarding the use of AI in the future when defining trustworthy AI.

6.6 Limitations - reliability and validity of the results

The research study has some limitations regarding the number of participants participating in the primary data collection. Only 12 participants were interviewed for this study, limiting the quality of the findings due to the small sample size. Quantitative research design could be used to understand better how AI tools can be implemented within companies. The literature study was limited to the research studies available that can not keep up with the rapid development of new AI tools in this emerging field. Consequently, the study occasionally had to rely on sources with potentially lower levels of reliability. The study was also limited due to the chosen region, and if a larger region had been chosen, perhaps the research data would have been different. In addition, another limitation is that the responses primarily relied on the interviewees' personal work experiences, bias and asked questions. This information can affect the quality of the results. The study's results were limited to interviewing people's knowledge about AI tools, which is also affected by their backgrounds. Another significant limitation is the rapid pace of technology

advancements in the domain of AI tools. This dynamic change may cause some of the results of this thesis to be limited to the current context of the time period when this thesis was written. Lastly, there was a restricted focus on the geographic location of participants in the interview selection, which may limit the generalizability of the study's findings.

6.7 FURTHER RESEARCH

Future research could be done with individuals who did not have a technical/entrepreneurial background to get different insights to compare findings with the current study. Future research could be done with more participants and extended interviews to gather further insights about the company, its marketing efforts and the different tools used. Future research may benefit from interviewing larger companies with high revenues to gain different insights about the effect of AI tools within the company. In addition, experienced professionals who implement AI tools within the companies could be interviewed to compare the findings with the current study. Also, further research could be done using data from different regions. Furthermore, studies could establish a causal correlation between suggested factors and AI adoption. Additionally, a comparative study could be performed to understand the differences between companies that implemented AI tools and those that did not.

7 REFERENCES

- Abdolrasol, M. G. M., Hussain, S. M. S., Ustun, T. S., Sarker, M. R., Hannan, M. A., Mohamed, R., Ali, J. A., Mekhilef, S. & Milad, A. (2021). Artificial Neural Networks Based Optimization Techniques: A Review, *Electronics*, vol. 10, no. 21, p.2689
- Adhabi, E. A. & Anozie, C. B. (2017). Literature Review for the Type of Interview in Qualitative Research, *International Journal of Education*, vol. 9, no. 3, p.86.
- Alareeni, B., Hamdan, A., Hamdan, R. & Shoaib, H. M. (2022). Marketing and Entrepreneurship: Challenges and Opportunities, *Journal of Strategic Marketing*, pp.1–8.
- Alloghani, M., Al-Jumeily, D., Mustafina, J., Hussain, A. & Aljaaf, A. J. (2019). A Systematic Review on Supervised and Unsupervised Machine Learning Algorithms for Data Science, Unsupervised and Semi-Supervised Learning, pp.3–21.
- Ahi, A. A., Sinkovics, N., Shildibekov, Y., Sinkovics, R. R. & Mehandjiev, N. (2022). Advanced Technologies and International Business: A Multidisciplinary Analysis of the Literature, *International Business Review*, vol. 31, no. 4, p.101967
- Ahmad, N. S., Musa, R. & Harun, M. H. M. (2016). The Impact of Social Media Content Marketing (SMCM) towards Brand Health, *Procedia Economics and Finance*, vol. 37, pp.331–336
- Allen, M. (2017). The SAGE Encyclopedia of Communication Research Methods, [e-book] 2455 Teller Road, Thousand Oaks California 91320: SAGE Publications, Inc, Available Online: https://methods.sagepub.com/reference/the-sage-encyclopedia-of-communication-research-methods [Accessed 2 April 2023]
- Alqahtani, N., Uslay, C. & Yeniyurt, S. (2022). Entrepreneurial Marketing and Firm Performance: Scale Development, Validation, and Empirical Test, *Journal of Strategic Marketing*, pp.1–22
- Al-Surmi, A., Bashiri, M. & Koliousis, I. (2022). AI Based Decision Making: Combining Strategies to Improve Operational Performance, *International Journal of Production Research*, vol. 60, no. 14, pp.4464–4486
- Alzubaidi, L., Zhang, J., Humaidi, A. J., Al-Dujaili, A., Duan, Y., Al-Shamma, O., Santamaría, J., Fadhel, M. A., Al-Amidie, M. & Farhan, L. (2021). Review of Deep Learning: Concepts, CNN Architectures, Challenges, Applications, Future Directions, *Journal of Big Data*, vol. 8, no. 1, p.53

- Bakhtieva, E. (2017). B2B Digital Marketing Strategy: A Framework for Assessing Digital Touchpoints and Increasing Customer Loyalty Based on Austrian Companies from Heating, Ventilation and Air Conditioning Industry, *Oeconomia Copernicana*, [e-journal] vol. 8, no. 3, Available Online: http://economic-research.pl/Journals/index.php/oc/article/view/252 [Accessed 12 February 2023]
- Bala, D. M. & Verma, M. D. (2018). A Critical Review of Digital Marketing
- Baldwin, J. R., Pingault, J.-B., Schoeler, T., Sallis, H. M. & Munafò, M. R. (2022). Protecting against Researcher Bias in Secondary Data Analysis: Challenges and Potential Solutions, *European Journal of Epidemiology*, vol. 37, no. 1, pp.1–10
- Barnea, A. (2020). How Will AI Change Intelligence and Decision-Making?, *Journal of Intelligence Studies in Business*, [e-journal] vol. 1, no. 1, Available Online: https://ojs.hh.se/index.php/JISIB/article/view/564 [Accessed 19 May 2023]
- Bell, E., Bryman, A. & Dryman, A. & Dryman, A. & Dryman, B. (2022). Business Research Methods, Oxford, United Kingdom: Oxford University Press.
- Benbya, H., Deakin University, Melbourne, Australia, Pachidi, S., Cambridge JudgeBusiness School, University of Cambridge, United Kingdom, Jarvenpaa, S. L., & McCombs School of Business, University of Texas at Austin, U.S.A. (2021). Special Issue Editorial: Artificial Intelligence in Organizations: Implications for Information Systems Research, *Journal of the Association for Information Systems*, vol. 22, no. 2, pp.281–303
- Bermeo-Giraldo, M. C., Valencia-Arias, A., Ramos de Rosas, J. D., Benjumea-Arias, M. & Villanueva Calderón, J. A. (2022). Factors Influencing the Use of Digital Marketing by Small and Medium-Sized Enterprises during COVID-19, Informatics, vol. 9, no. 4, p.86
- Braun, V. & Clarke, V. (2023). Toward Good Practice in Thematic Analysis: Avoiding Common Problems and Be(Com)Ing a *Knowing* Researcher, *International Journal of Transgender Health*, vol. 24, no. 1, pp.1–6
- Bryman, A., & Bell, E. (2015). Business research methods (Vol. 4). Bell & Bain Ltd.
- Chatterjee, S., Chaudhuri, R., Kamble, S., Gupta, S. & Sivarajah, U. (2022a). Adoption of Artificial Intelligence and Cutting-Edge Technologies for Production System Sustainability: A Moderator-Mediation Analysis, *Information Systems Frontiers*, [e-journal], Available Online: https://link.springer.com/10.1007/s10796-022-10317-x [Accessed 23 February 2023]

- Chatterjee, S., Chaudhuri, R., Vrontis, D. & Papadopoulos, T. (2022b). Examining the Impact of Deep Learning Technology Capability on Manufacturing Firms: Moderating Roles of Technology Turbulence and Top Management Support, *Annals of Operations Research*, [e-journal], Available Online: https://link.springer.com/10.1007/s10479-021-04505-2 [Accessed 19 May 2023]
- Chatterjee, S., Ghosh, S. K., Chaudhuri, R. & Nguyen, B. (2019). Are CRM Systems Ready for AI Integration?: A Conceptual Framework of Organizational Readiness for Effective AI-CRM Integration, *The Bottom Line*, vol. 32, no. 2, pp.144–157
- Chen, J., Ablanedo-Rosas, J. H., Frankwick, G. L. & Arévalo, F. R. J. (2022). The State of Artificial Intelligence in Marketing With Directions for Future Research:, *International Journal of Business Intelligence Research*, vol. 12, no. 2, pp.1–26
- Chen, D., Esperança, J. P. & Damp; Wang, S. (2022). The Impact of Artificial Intelligence on Firm Performance: An Application of the Resource-Based View to e-Commerce Firms, Frontiers in Psychology, vol. 13.
- Cheng, X., Lin, X., Shen, X.-L., Zarifis, A. & Mou, J. (2022). The Dark Sides of AI, *Electronic Markets*, vol. 32, no. 1, pp.11–15
- Chirila, S., Antohe, A., Isar, C., Panaitescu, C. & Malpass, A. (2023). Romanian Young Adult Perceptions on Using Heated Tobacco Products Following Exposure to Direct Marketing Methods, *npj Primary Care Respiratory Medicine*, vol. 33, no. 1, p.8
- Choudhury, P., Starr, E. & Agarwal, R. (2020). Machine Learning and Human Capital Complementarities: Experimental Evidence on Bias Mitigation, *Strategic Management Journal*, vol. 41, no. 8, pp.1381–1411
- Chowdhury, S., Dey, P., Joel-Edgar, S., Bhattacharya, S., Rodriguez-Espindola, O., Abadie, A. & Truong, L. (2023). Unlocking the Value of Artificial Intelligence in Human Resource Management through AI Capability Framework, *Human Resource Management Review*, vol. 33, no. 1, p.100899
- Collinson, E. & Shaw, E. (2001). Entrepreneurial Marketing a Historical Perspective on Development and Practice, *Management Decision*, vol. 39, no. 9, pp.761–766
- Court, D., Elzinga, D., Mulder, S. & Vetvik, O. J. (2009). The Consumer Decision Journey

- D'Arco, M., Lo Presti, L., Marino, V. & Resciniti, R. (2019). Embracing AI and Big Data in Customer Journey Mapping: From Literature Review to a Theoretical Framework, *Innovative Marketing*, vol. 15, no. 4, pp.102–115
- Davenport, T., Guha, A., Grewal, D. & Bressgott, T. (2020). How Artificial Intelligence Will Change the Future of Marketing, *Journal of the Academy of Marketing Science*, vol. 48, no. 1, pp.24–42
- De Mauro, A., Sestino, A. & Bacconi, A. (2022). Machine Learning and Artificial Intelligence Use in Marketing: A General Taxonomy, *Italian Journal of Marketing*, vol. 2022, no. 4, pp.439–457
- Dearing, J. W. & Cox, J. G. (2018). Diffusion Of Innovations Theory, Principles, And Practice, *Health Affairs*, vol. 37, no. 2, pp.183–190
- Dong, F., Zhang, S., Zhu, J. & Sun, J. (2021). The Impact of the Integrated Development of AI and Energy Industry on Regional Energy Industry: A Case of China, *International Journal of Environmental Research and Public Health*, vol. 18, no. 17, p.8946
- Doody, O. & Noonan, M. (2013). Preparing and Conducting Interviews to Collect Data, *Nurse Researcher*, vol. 20, no. 5, pp.28–32
- Douglas, H. A., Hamilton, R. J. & Grubs, R. E. (2009). The Effect of BRCA Gene Testing on Family Relationships: A Thematic Analysis of Qualitative Interviews, *Journal of Genetic Counseling*, vol. 18, no. 5, pp.418–435
- Dudnik, O., Vasiljeva, M., Kuznetsov, N., Podzorova, M., Nikolaeva, I., Vatutina, L., Khomenko, E. & Ivleva, M. (2021). Trends, Impacts, and Prospects for Implementing Artificial Intelligence
- Technologies in the Energy Industry: The Implication of Open Innovation, Journal of Open Innovation: Technology, Market, and Complexity, vol. 7, no. 2, p.155
- du Plessis, C. (2022). A Scoping Review of the Effect of Content Marketing on Online Consumer Behavior, *SAGE Open*, vol. 12, no. 2, p.215824402210930.
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V.,
 Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel,
 P. A., Rowley, J., Salo, J., Tran, G. A. & Wang, Y. (2021). Setting the Future of Digital and
 Social Media Marketing Research: Perspectives and Research Propositions, *International Journal of Information Management*, vol. 59, p.102168

- Dymitrowski, A. & Mielcarek, P. (2021). Business Model Innovation Based on New Technologies and Its Influence on a Company's Competitive Advantage, *Journal of Theoretical and Applied Electronic Commerce Research*, vol. 16, no. 6, pp.2110–2128
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K. & Kyngäs, H. (2014). Qualitative Content Analysis: A Focus on Trustworthiness, *SAGE Open*, vol. 4, no. 1, p.215824401452263
- Faruk, M., Rahman, M. & Hasan, S. (2021). How Digital Marketing Evolved over Time: A Bibliometric Analysis on Scopus Database, *Heliyon*, vol. 7, no. 12, p.e08603
- Fireflies.Ai, AI Notetaker to Transcribe, Summarize, Analyze Meetings. (2023). *Fireflies*, Available Online: https://fireflies.ai [Accessed 17 May 2023]
- Galdas, P. (2017). Revisiting Bias in Qualitative Research: Reflections on Its Relationship With Funding and Impact, *International Journal of Qualitative Methods*, vol. 16, no. 1, p.160940691774899
- Grewal, D., Guha, A., Satornino, C. B. & Schweiger, E. B. (2021). Artificial Intelligence: The Light and the Darkness, *Journal of Business Research*, vol. 136, pp.229–236
- Gupta, S., Modgil, S., Choi, T.-M., Kumar, A. & Antony, J. (2023). Influences of Artificial Intelligence and Blockchain Technology on Financial Resilience of Supply Chains, *International Journal of Production Economics*, vol. 261, p.108868
- Haase, S., Zweigenthal, V. & Müller, A. (2022). Using Online Spaces to Recruit Kenyan Queer Womxn and Trans Men in Restrictive Offline Settings, *Archives of Public Health*, vol. 80, no. 1, p.82
- Haleem, A., Javaid, M., Asim Qadri, M., Pratap Singh, R. & Suman, R. (2022). Artificial Intelligence (AI) Applications for Marketing: A Literature-Based Study, *International Journal* of *Intelligent Networks*, vol. 3, pp.119–132
- Hildebrand, C. (2019). The Machine Age of Marketing: How Artificial Intelligence Changes the Way People Think, Act, and Decide, *NIM Marketing Intelligence Review*, vol. 11, no. 2, pp.10–17
- Hinton, G. E. & Salakhutdinov, R. R. (2006). Reducing the Dimensionality of Data with Neural Networks, *Science*, vol. 313, no. 5786, pp.504–507
- Hoffman, D. L., Moreau, C. P., Stremersch, S. & Wedel, M. (2022). The Rise of New Technologies in Marketing: A Framework and Outlook, *Journal of Marketing*, vol. 86, no. 1, pp.1–6

- Hull, C. E., Hung, Y. T. C., Hair, N., Perotti, V. & DeMartino, R. (2007). Taking Advantage of Digital Opportunities: A Typology of Digital Entrepreneurship, *International Journal of Networking and Virtual Organisations*, vol. 4, no. 3, p.290
- Jamshed, S. (2014). Qualitative Research Method-Interviewing and Observation, Journal of Basic and Clinical Pharmacy, vol. 5, no. 4, p.87.
- Janiesch, C., Zschech, P. & Heinrich, K. (2021). Machine Learning and Deep Learning, *Electronic Markets*, vol. 31, no. 3, pp.685–695
- Jarek, K. & Mazurek, G. (2019). Marketing and Artificial Intelligence, *Central European Business Review*, vol. 8, no. 2, pp.46–55
- Karimi, H., Derr, T. & Tang, J. (2020). Characterizing the Decision Boundary of Deep Neural Networks, arXiv:1912.11460, Available Online: http://arxiv.org/abs/1912.11460 [Accessed 19 May 2023]
- Karhunen, J., Raiko, T., & Cho, K. (2015). Unsupervised Deep Learning: A Short Review. In S. K. Ella Bingham (Ed.), Advances in Independent Component Analysis and Learning Machines (pp. Chapter 7, pp. 125-142). Academic Press.
- Korinek, A., Schindler, M. and Stiglitz, J.E. (2021) Technological Progress and Artificial Intelligence', How to Achieve Inclusive Growth, pp. 163–211. doi:10.1093/oso/9780192846938.003.0005.
- Korinek A., Stiglitz J. E. (2017). Artificial intelligence and its implications for income distribution and unemployment. National Bureau of Economic Researcho.
- Kose, U. & Sert, S. (2017). Improving Content Marketing Process with the Approaches by Artificial Intellegence, vol. 6, no. 1
- Krogh, G. V., Ben-Menahem, S. M. & Shrestha, Y. R. (2021). Artificial Intelligence in Strategizing: Prospects and Challenges, in *Strategic Management*, [e-book] Oxford University Press, pp.625–646, Available Online: https://academic.oup.com/book/39240/chapter/338769107 [Accessed 4 May 2023]
- Laaziz, E. H. (2020). AI Based Forecasting in Fast Fashion Industry: A Review, *IOP Conference Series: Materials Science and Engineering*, vol. 827, no. 1, p.012065

- Langan, R., Cowley, S. & Nguyen, C. (2019). The State of Digital Marketing in Academia: An Examination of Marketing Curriculum's Response to Digital Disruption, *Journal of Marketing Education*, vol. 41, no. 1, pp.32–46
- LeCun, Y., Bengio, Y. & Hinton, G. (2015). Deep Learning, Nature, vol. 521, no. 7553, pp.436–444
- Lee, P., Bubeck, S. & Petro, J. (2023). Benefits, Limits, and Risks of GPT-4 as an AI Chatbot for Medicine, *n engl j med*
- Lemon, K. N. & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey, *Journal of Marketing*, vol. 80, no. 6, pp.69–96
- Lester, J. N., Cho, Y. & Lochmiller, C. R. (2020). Learning to Do Qualitative Data Analysis: A Starting Point, *Human Resource Development Review*, vol. 19, no. 1, pp.94–106
- Li, C. H., Chan, O. L. K., Chow, Y. T., Zhang, X., Tong, P. S., Li, S. P., Ng, H. Y. & Keung, K. L. (2022). Evaluating the Effectiveness of Digital Content Marketing Under Mixed Reality Training Platform on the Online Purchase Intention, *Frontiers in Psychology*, vol. 13, p.881019
- Linardatos, P., Papastefanopoulos, V. & Kotsiantis, S. (2020). Explainable AI: A Review of Machine Learning Interpretability Methods, *Entropy*, vol. 23, no. 1, p.18
- Pederson, L., Vingilis, E., Wickens, C., & Koval, J. (2020). Use of Secondary Data Analyses in Research: Pros and Cons, vol. 058, no. 060
- Lou, C., Xie, Q., Feng, Y. & Kim, W. (2019). Does Non-Hard-Sell Content Really Work?

 Leveraging the Value of Branded Content Marketing in Brand Building, *Journal of Product & Brand Management*, vol. 28, no. 7, pp.773–786
- Mariani, M. M., Perez-Vega, R. & Wirtz, J. (2022). AI in Marketing, Consumer Research and Psychology: A Systematic Literature Review and Research Agenda, *Psychology & Marketing*, vol. 39, no. 4, pp.755–776
- McCarthy, J., Minsky, M. L., Rochester, N., Corporation, I. B. M. & Shannon, C. E. (1955). A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence, vol. 1955
- Mikalef, P., Conboy, K., Lundström, J. E. & Popovič, A. (2022). Thinking Responsibly about Responsible AI and 'the Dark Side' of AI, *European Journal of Information Systems*, vol. 31, no. 3, pp.257–268
- Mishra, A. K. (2021). AI4R2R (AI for Rock to Revenue): A Review of the Applications of AI in Mineral Processing, *Minerals*, vol. 11, no. 10, p.1118

- Momade, M. H., Durdyev, S., Estrella, D. & Ismail, S. (2021). Systematic Review of Application of Artificial Intelligence Tools in Architectural, Engineering and Construction, *Frontiers in Engineering and Built Environment*, vol. 1, no. 2, pp.203–216
- Moser, A. & Korstjens, I. (2018). Series: Practical Guidance to Qualitative Research. Part 3: Sampling, Data Collection and Analysis, *European Journal of General Practice*, vol. 24, no. 1, pp.9–18
- Mukhamediev, R. I., Popova, Y., Kuchin, Y., Zaitseva, E., Kalimoldayev, A., Symagulov, A.,
 Levashenko, V., Abdoldina, F., Gopejenko, V., Yakunin, K., Muhamedijeva, E. & Yelis, M.
 (2022). Review of Artificial Intelligence and Machine Learning Technologies: Classification,
 Restrictions, Opportunities and Challenges, *Mathematics*, vol. 10, no. 15, p.2552
- Nambisan, S. (2017). Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship, *Entrepreneurship Theory and Practice*, vol. 41, no. 6, pp.1029–1055
- Nagappan, R. (2001). Dealing With Biases In Qualitative Research: A Balancing Act For Researchers, Qualitative Research Convention, Kuala Lumpur, malaysia, 2001, Kuala Lumpur, malaysia, Available Online: http://merr.utm.my/4087/ [Accessed 2 April 2023]
- Nemoto, M. C. M. O., Vasconcellos, E. P. G. D. & Nelson, R. (2010). The Adoption of New Technology: Conceptual Model and Application, *Journal of technology management & innovation*, vol. 5, no. 4, pp.95–107
- Neuhaus, T., Millemann, J. A. & Nijssen, E. (2022). Bridging the Gap between B2B and B2C: Thought Leadership in Industrial Marketing A Systematic Literature Review and Propositions, *Industrial Marketing Management*, vol. 106, pp.99–111
- Nichols, J. A., Herbert Chan, H. W. & Baker, M. A. (2018). Machine Learning: Applications of Artificial Intelligence to Imaging and Diagnosis, *Biophysical Reviews*, vol. 11, no. 1, pp.111–118.
- Nowell, L. S., Norris, J. M., White, D. E. & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria, *International Journal of Qualitative Methods*, vol. 16, no. 1, p.160940691773384
- Otter.Ai Voice Meeting Notes & Real-Time Transcription. (2023)., Available Online: https://otter.ai/ [Accessed 17 May 2023]
- Pantouvakis, A. & Gerou, A. (2022). The Theoretical and Practical Evolution of Customer Journey and Its Significance in Services Sustainability, *Sustainability*, vol. 14, no. 15, p.9610

- Peltier, J. W., Zhao, Y. & Schibrowsky, J. A. (2012). Technology Adoption by Small Businesses: An Exploratory Study of the Interrelationships of Owner and Environmental Factors, *International Small Business Journal: Researching Entrepreneurship*, vol. 30, no. 4, pp.406–431
- Perifanis, N.-A. & Kitsios, F. (2023). Investigating the Influence of Artificial Intelligence on Business Value in the Digital Era of Strategy: A Literature Review, *Information*, vol. 14, no. 2, p.85
- Peyravi, B., Nekrošienė, J. & Lobanova, L. (2020). Revolutionised Technologies For Marketing: Theoretical Review with Focus on Artificial Intelligence, *Business: Theory and Practice*, vol. 21, no. 2, pp.827–834
- Phatak, A. A., Wieland, F.-G., Vempala, K., Volkmar, F. & Memmert, D. (2021). Artificial Intelligence Based Body Sensor Network Framework—Narrative Review: Proposing an Endto-End Framework Using Wearable Sensors, Real-Time Location Systems and Artificial Intelligence/Machine Learning Algorithms for Data Collection, Data Mining and Knowledge Discovery in Sports and Healthcare, *Sports Medicine Open*, vol. 7, no. 1, p.79
- Puangpontip, S. & Hewett, R. (2022). On Using Deep Learning for Business Analytics: At What Cost?, *Procedia Computer Science*, vol. 207, pp.3738–3747
- Pulizzi, J. (2012). The Rise of Storytelling as the New Marketing, *Publishing Research Quarterly*, vol. 28, no. 2, pp.116–123
- Ren, K., Zheng, T., Qin, Z. & Liu, X. (2020). Adversarial Attacks and Defenses in Deep Learning, *Engineering*, vol. 6, no. 3, pp.346–360
- Rizvanović, B., Zutshi, A., Grilo, A. & Nodehi, T. (2023). Linking the Potentials of Extended Digital Marketing Impact and Start-up Growth: Developing a Macro-Dynamic Framework of Start-up Growth Drivers Supported by Digital Marketing, *Technological Forecasting and Social Change*, vol. 186, p.122128
- Robinson, O. C. (2014). Sampling in Interview-Based Qualitative Research: A Theoretical and Practical Guide, *Qualitative Research in Psychology*, vol. 11, no. 1, pp.25–41
- Rogers, E. M. (1983). Diffusion of Innovations, 3rd ed., New York: London: Free Press; Collier Macmillan
- Roundy, P. T. (2022). Artificial Intelligence and Entrepreneurial Ecosystems: Understanding the Implications of Algorithmic Decision-Making for Startup Communities, *Journal of Ethics in Entrepreneurship and Technology*, vol. 2, no. 1, pp.23–38

- Russell, S. J., Norvig, P. & Davis, E. (2010). Artificial Intelligence: A Modern Approach, 3rd ed., Upper Saddle River: Prentice Hall
- Rust, R. T. (2020). The Future of Marketing, *International Journal of Research in Marketing*, vol. 37, no. 1, pp.15–26
- Rusthollkarhu, S., Toukola, S., Aarikka-Stenroos, L. & Mahlamäki, T. (2022). Managing B2B Customer Journeys in Digital Era: Four Management Activities with Artificial Intelligence-Empowered Tools, *Industrial Marketing Management*, vol. 104, pp.241–257
- Sarasvathy, S. D. (2001). Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency
- Sarker, I. H. (2021). Deep Learning: A Comprehensive Overview on Techniques, Taxonomy, Applications and Research Directions, *SN Computer Science*, vol. 2, no. 6, p.420
- Saunders, M. N. K., Lewis, P. & Thornhill, A. (2019). Research Methods for Business Students, Eighth Edition., New York: Pearson
- Saunders M., Philip Lewis, Adrian Thornhill (2016). Research Methods for Business Students. Published by Pearson (2016).
- Sevilla-Bernardo, J., Sanchez-Robles, B. & Herrador-Alcaide, T. C. (2022). Success Factors of Startups in Research Literature within the Entrepreneurial Ecosystem, *Administrative Sciences*, vol. 12, no. 3, p.102
- Sharma, H. (2021). Effectiveness of Online Marketing Tools: A Case Study, *Paradigm*, vol. 25, no. 1, pp.77–86
- Shehadeh, M., Almohtaseb, A., Aldehayyat, J. & Abu-AlSondos, I. A. (2023). Digital Transformation and Competitive Advantage in the Service Sector: A Moderated-Mediation Model, Sustainability, vol. 15, no. 3, p.2077.
- Shrestha, Y. R., Krishna, V. & von Krogh, G. (2021). Augmenting Organizational Decision-Making with Deep Learning Algorithms: Principles, Promises, and Challenges, *Journal of Business Research*, vol. 123, pp.588–603
- Snyder, H. (2019). Literature Review as a Research Methodology: An Overview and Guidelines, *Journal of Business Research*, vol. 104, pp.333–339

- Stalidis, G., Karapistolis, D. & Vafeiadis, A. (2015). Marketing Decision Support Using Artificial Intelligence and Knowledge Modeling: Application to Tourist Destination Management, *Procedia Social and Behavioral Sciences*, vol. 175, pp.106–113
- Stix, C. (2022). Artificial Intelligence by Any Other Name: A Brief History of the Conceptualization of "Trustworthy Artificial Intelligence", *Discover Artificial Intelligence*, vol. 2, no. 1, p.26
- Susskind R. E., Susskind D. (2015). The future of the professions: How technology will transform the work of human experts. Oxford University Press.
- Syam, N. & Sharma, A. (2018). Waiting for a Sales Renaissance in the Fourth Industrial Revolution: Machine Learning and Artificial Intelligence in Sales Research and Practice, Industrial Marketing Management, vol. 69, pp.135–146
- Tai, M.-T. (2020). The Impact of Artificial Intelligence on Human Society and Bioethics, *Tzu Chi Medical Journal*, vol. 32, no. 4, p.339
- Tarafdar, M., Gupta, A. & Turel, O. (2013). The Dark Side of Information Technology Use: The Dark Side of Information Technology Use, *Information Systems Journal*, vol. 23, no. 3, pp.269–275
- Tornikoski, E. T., Rannikko, H. & Heimonen, T. P. (2017). Technology-Based Competitive Advantages of Young Entrepreneurial Firms: Conceptual Development and Empirical Exploration, *Journal of Small Business Management*, vol. 55, no. 2, pp.200–215
- Transcribe Video and Audio to Text, Content Editor, Trint. (2023). , Available Online: https://trint.com/ [Accessed 17 May 2023]
- Turing, A. (2004). Computing Machinery and Intelligence (1950), in *The Essential Turing*, [e-book] Oxford University Press, Available Online: https://academic.oup.com/book/42030/chapter/355746326 [Accessed 9 February 2023]
- Uma Maheswaran, S. K., Kaur, G., Pankajam, A., Firos, A., Vashistha, P., Tripathi, V. &
 Mohammed, H. S. (2022). Empirical Analysis for Improving Food Quality Using Artificial
 Intelligence Technology for Enhancing Healthcare Sector, *Journal of Food Quality*, vol. 2022, pp.1–13
- Universidad espiritu santo, Fierro, I., Cardona Arbelaez, D. A., Universidad libre, Gavilanez, J., & Universidad espiritu santo. (2017). Marketing Digital: Una Nueva Herramienta Para Internacionalizar La Educación, *Revista científica Pensamiento y Gestión*, no. 43, pp.220–240

- Vaismoradi, M., Turunen, H. & Bondas, T. (2013). Content Analysis and Thematic Analysis: Implications for Conducting a Qualitative Descriptive Study: Qualitative Descriptive Study, *Nursing & Health Sciences*, vol. 15, no. 3, pp.398–405
- Veleva, S. S. & Tsvetanova, A. I. (2020). Characteristics of the Digital Marketing Advantages and Disadvantages, *IOP Conference Series: Materials Science and Engineering*, vol. 940, no. 1, p.012065
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Dong, J., Fabian, N. & Haenlein, M. (2021). Digital Transformation: A Multidisciplinary Reflection and Research Agenda, Journal of Business Research, vol. 122, pp.889–901.
- Verma, S., Sharma, R., Deb, S. & Maitra, D. (2021). Artificial Intelligence in Marketing: Systematic Review and Future Research Direction, *International Journal of Information Management Data Insights*, vol. 1, no. 1, p.100002
- Wang, W. & Siau, K. (2018). Artificial Intelligence: A Study on Governance, Policies, and Regulations
- Wang, W.-L., Malthouse, E. C., Calder, B. & Uzunoglu, E. (2019). B2B Content Marketing for Professional Services: In-Person versus Digital Contacts, *Industrial Marketing Management*, vol. 81, pp.160–168
- Wirtz, B. W., Weyerer, J. C. & Sturm, B. J. (2020). The Dark Sides of Artificial Intelligence: An Integrated AI Governance Framework for Public Administration, *International Journal of Public Administration*, vol. 43, no. 9, pp.818–829
- Yigit, A. & Kanbach, D. (2021). The Importance of Artificial Intelligence in Strategic Management: A Systematic Literature Review, *International Journal of Strategic Management*, vol. 21, no. 1, pp.5–40
- Zeigler-Hill, V. & Shackelford, T. K. (eds). (2020). Encyclopedia of Personality and Individual Differences, [e-book] Cham: Springer International Publishing, Available Online: http://link.springer.com/10.1007/978-3-319-24612-3 [Accessed 17 May 2023]

8 APPENDIX

Preliminary questions:

- What is the company specialized in? Sector/activity?
- How long has the company been established?
- How many employees are there in the company?
- What is the company's target market?
- What is your occupation or role in the company?
- What does your customer journey look like in your content marketing setup?

Main questions:

- What AI tools do you use today?
- In what ways has digital marketing affected the company?
- How can digital marketing help companies to grow? In the context of brand awareness, building trust and customer awareness.
- What digital marketing strategies your company uses? (e.g. Inbound
- marketing, social media marketing, content marketing, ect.)?
- What challenges does your start-up/company face in digital marketing?
- Which kind of digital media channels are used in your company?
- Why do you think start-up companies are ready to implement new technologies into their businesses?
- How and where do you recognise innovation opportunities?
- How do you notice the value of new technology you can bring to your business?
- What motivates you to adopt new technologies?
- What are the reasons why you don't want to implement new tools into your startup?
- Do you think that innovative technology addition in your company can give you a competitive advantage against other companies?

- Are you familiar with AI-based tools for startups/marketing efforts/content marketing? How would you implement them a company?
- Have you ever tried implementing AI tools in your marketing efforts to improve your company's efficiency, save resources, and increase conversations? If not (why?) if yes (why?)
- What do you perceive as the drawbacks or challenges of using AI tools in content marketing?
- How did you first learn about AI tools for content marketing?
- What sources of information did you rely on when deciding whether to adopt AI tools for content marketing?
- How do you communicate with other stakeholders (e.g., employees, customers, investors) about your use of AI tools in content marketing?
- How comfortable are you with adopting new technologies in general?
- How does your demographic background or industry experience influence your decision-making process regarding adopting new technologies?
- Do you have your own opinions about AI tools and how they will benefit companies in the future?
- Do you know any other startup founders that use AI in their marketing effort?
- Is there anything else that you would like to add?