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ASSESSING AI'S POTENTIAL IN MARKETING CONTENT CREATION

Master's thesis

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I have written this Master's Thesis independently. Any ideas or data taken from other authors or other sources have been fully referenced.

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Abstract

This study assesses the contribution of artificial intelligence (AI) tools to marketing content's success, beginning with identifying 13 key success factors (KSFs) of marketing content derived from academic literature and practitioner insights. In a controlled experiment involving 18 newsletters, consisting of nine AI-assisted creations and nine exclusively human-generated ones, industry experts assessed their performance against the specified KSFs. The findings of the study demonstrate a clear preference among surveyed experts for newsletters crafted solely by humans, as they consistently surpass those aided by AI across all evaluated KSFs. Results suggest that while AI can support content creation, human-driven processes craft better outcomes in terms of expert evaluation and quality. These findings highlight the superior outcomes of human creativity in marketing content production and challenge the quality of current AI tools in this creative domain.

Keywords: Marketing content creation, AI, marketing newsletters, content marketing
Common European Research Classification Scheme (CERCS): S190 Management of enterprises

Introduction

The rapid advancement of artificial intelligence (AI) technologies in recent years has triggered significant discussions regarding their transformative potential across various sectors, for example, in marketing and sales, product development, and service-related tasks (McKinsey, 2023). As a consequential development, scholars have explored the impact of AI on the economy, encompassing productivity, growth, inequality, market power, innovation, and employment (Agrawal et al., 2019; Capraro et al., 2023; Czarnitzki et al., 2023; Cockburn et al., 2017). Notably, the marketing sector has emerged as a prominent arena for applying AI tools, leading to a discourse on the potential domination of AI in shaping marketing strategies and campaigns.

Amidst the influence of AI, marketing has emerged as a focal point of discussion, raising intriguing questions about the potential triumph of AI in this sector. Speculation surrounding the dominance of AI in marketing evokes concerns about the displacement of marketing professionals as AI progressively assumes control over the conceptualization and execution of marketing activities and campaigns. This concern is substantiated by studies such as that of Chintalapati and Pandey (2021), which underscores the positive impact of AI-

enabled marketing practices on innovation in marketing strategies across various functional areas.

While existing literature extensively explores the essence of AI and its overall role, there is a notable gap in understanding the specific impact of AI adoption on a fundamental element of marketing—marketing content assets. Czarnitzki et al. (2023) emphasize the need for empirical evidence to discern how AI enhances the business sector.

Motivated by the author's curiosity and observation of the ongoing debates on marketing versus AI, the **aim of this study is to assess, using a content marketing success factors framework, whether the collaboration of human intelligence with AI possesses the capacity to generate marketing content that rival or surpass those crafted solely by human intelligence, with a specific focus on marketing newsletters.** This inquiry also extends our knowledge of how AI can augment the success of marketing content by considering success factors proposed by both academia and industry experts and implemented with experts know-how.

To address these inquiries, this study is structured around two primary research questions:

- 1) What are the key success factors of content marketing assets?
- 2) In what ways, if any, does AI contribute to the success and creation of marketing content?

This study will mainly focus on Generative AI, especially ChatGPT 4.0, which is widely available for public use. Introduced in 2022, Generative AI processes text, code, images, sound, and video to create new content. Trained on extensive datasets, it comprehends various media forms and is applicable across diverse industries. ("The Economic Opportunity of AI in Estonia," 2024) ChatGPT will be the primary experiment tool for the group that can use AI tools, as it allows the extraction of prompts and analysis of the interaction between humans and AI by showcasing how AI is used during content creation. As AI tools are constantly changing, this research will cover ChatGPT with the status of the first quarter of 2024, falling between January and April.

Experiments serve as a crucial research method in the field of generative AI, especially in light of recent scholarly advancements. Their significance and relevance in contemporary studies cannot be overstated. For instance, Dell'Acqua et al. (2023) conducted experiments to investigate the performance implications of AI on realistic and complex tasks. Similarly, Peng et al. (2023) utilized experimental methods to measure the impact of AI on

productivity in programming tasks. However, most previous experimental works on AI have focused on specific factors, such as productivity, efficiency, or creativity. In contrast, this study is also experimental but evaluates a comprehensive set of 13 different marketing content factors. This broader perspective allows us to consider AI-human interactions in a more versatile manner than previous similar works.

During this experimental study, the objective is to compare the quality of marketing content – marketing newsletters – crafting between two groups comprising 18 individuals: one group consisting of 9 individuals utilizing AI tools, and the other group consisting of 9 other individuals not using AI tools. This is aligned with the common experimental research practices, as defined by Creswell (1994: 210): “Experimental research seeks to determine if a specific treatment influences an outcome in a study. This impact is assessed by providing specific treatment to one group and withholding it from another group.”

The primary focus of the experiments carried out in this study is the development of a marketing e-newsletter. However, it is crucial to underscore that the objective of this research is not to evaluate the real-life performance and send-out of the newsletters. Rather, it aims to assess and compare the quality of content between two groups: content created by humans with the assistance of AI tools and content crafted solely by human intelligence without AI tools. This evaluation centers on assessing content quality based on a framework of 13 key success factors (KSFs) and aims to determine whether AI tools contribute to enhancing the quality of crafted newsletters. Overall, newsletters in this study are utilized as a tool to evaluate the quality of marketing content rather than serving as the primary focus of the entire study. They are chosen as a practical and illustrative example of marketing material to assess content quality, given their suitability for preparation within a constrained timeframe and experimental setting.

Post-experiments, newsletters will be evaluated against 13 KSFs framework. The evaluation framework will be employed to assess marketing content created during experiments, focusing on determining whether humans or AI produce superior content. This framework defines 13 KSFs, derived from literature and confirmed by experts.

This study underscores the importance of marketing assets, which are fundamental to defining content marketing. Content marketing relies on a diverse range of assets, such as newsletters, to engage audiences. As AI adoption in marketing continues to rise, tools like ChatGPT are becoming increasingly prevalent for generating content marketing assets, i.e., newsletters. Hence, content marketing holds significant relevance within the scope of this

study. According to Pulizzi (2012: 116), content marketing involves "the creation of valuable, relevant, and compelling content by the brand itself on a consistent basis, used to generate a positive behavior from a customer or prospect of the brand." From this definition, KSFs in marketing content are related to their value, relevancy, and compelling nature. Moreover, Grunert and Ellegaard (1992: 17) describe a KSF as "a skill or resource that a business can invest in, which, on the market the business is operating on, explains a major part of the observable differences in perceived value and/or relative costs." This concept applies to marketing as an integral part of business management, suggesting that in content marketing, a KSF is a skill or resource crucial for shaping customer perceptions of a brand and its products or services. Eid and El-Gohary (2011) reinforce this view, asserting that successful marketing meets business objectives such as new sales, customer acquisition, market expansion, cost reduction, profit increase, market share growth, and enhanced brand equity. Thus, in this study, KSFs of content marketing are defined as factors that help fulfill marketing and business objectives, such as strengthening branding, acquiring new users, and generating sales. Examples of content marketing KSFs within the compiled framework include creativity, clarity, readability, and communication engagement level. Specific to assets such as newsletters, additional KSFs may encompass design, layout, personalization, and actionability.

Results in this study will be analyzed using a mixed methods approach, combining both quantitative and qualitative analyses—including coefficient of variation calculations and assessments of ChatGPT prompts and participant experiences with AI in marketing. Utilizing both quantitative and qualitative methods allows to leverage the strengths of both qualitative and quantitative research by finding solutions to complex problems. (Creswell, 1994)

The overall study is structured into three main sections. Initially, it provides a brief overview of AI, drawing on prior studies to set the context. Subsequently, the study explores differences between content crafted by human intelligence and those generated by AI, using existing research findings as a foundation. This is followed by a literature review of the success factors of content marketing, incorporating insights from both academic and practitioner perspectives. The study then proceeds to describe the methodology used and the results found. It concludes with a summary and conclusions. Through this comprehensive approach, the research aims to shed light on the dynamic interplay between AI and marketing content, addressing gaps in empirical evidence and offering valuable insights for both academia and industry.

The initial results of this study indicate that human intelligence currently holds an advantage over AI in content creation and marketing communications. This advantage is primarily due to human-specific skills and characteristics, such as creativity and empathy, which AI has not surpassed. However, AI proves beneficial in assisting with the creation of marketing materials, particularly for individuals who have experience in utilizing AI tools.

1. Literature review

1.1 The role of AI and its integration across industries

The contemporary landscape of technological evolution is characterized by the impact of Artificial Intelligence (AI), a dynamic force driving continuous learning and automation. AI redefines 'smart' behavior by continuously updating its knowledge, enabling the automation of complex tasks with human-like cognitive abilities. (Czarnitzki et al., 2023). In essence, AI mirrors human intelligence, perpetually enhancing itself by updating and expanding its knowledge base (Kumar, 2020).

Building on this understanding, Brynjolfsson et al. (2017) conceptualize AI as a form of intangible capital. It is an investment that accumulates over time, similar to traditional capital, and has the potential to grow over time. They suggest that AI has the potential to dramatically change the traditional elements involved in producing goods and services, which could transform the economic landscape. (Brynjolfsson et al, 2017)

This concept is further supported by Brynjolfsson et al. (2023) subsequent findings, which demonstrate how AI systems can harness and distribute the expertise of the most skilled workers within a company. They observed that AI assistance helps newer and less skilled workers improve their problem-solving abilities, although it does not significantly benefit the most skilled or experienced workers. Moreover, workers who have used AI tend to perform better overall. (Brynjolfsson et al., 2023)

However, as Cockburn et al. (2017) emphasize, the impact of AI on productivity is not unidimensional. While certain applications promise efficiency and quality improvements in existing processes, concerns about job displacements loom large. Deep learning, among other AI applications, not only contributes to productivity gains but also reshapes the very nature of innovation processes across sectors. (Cockburn et al., 2017) The author thinks that this is an especially valid idea in the context of producing marketing content. The time spent on the development of marketing campaigns, assets, and messages can take several weeks to even a couple of months. Now, with the help of AI, it's possible to brainstorm and deploy

marketing ideas faster than ever, which can potentially also shorten the time spent on campaign creation.

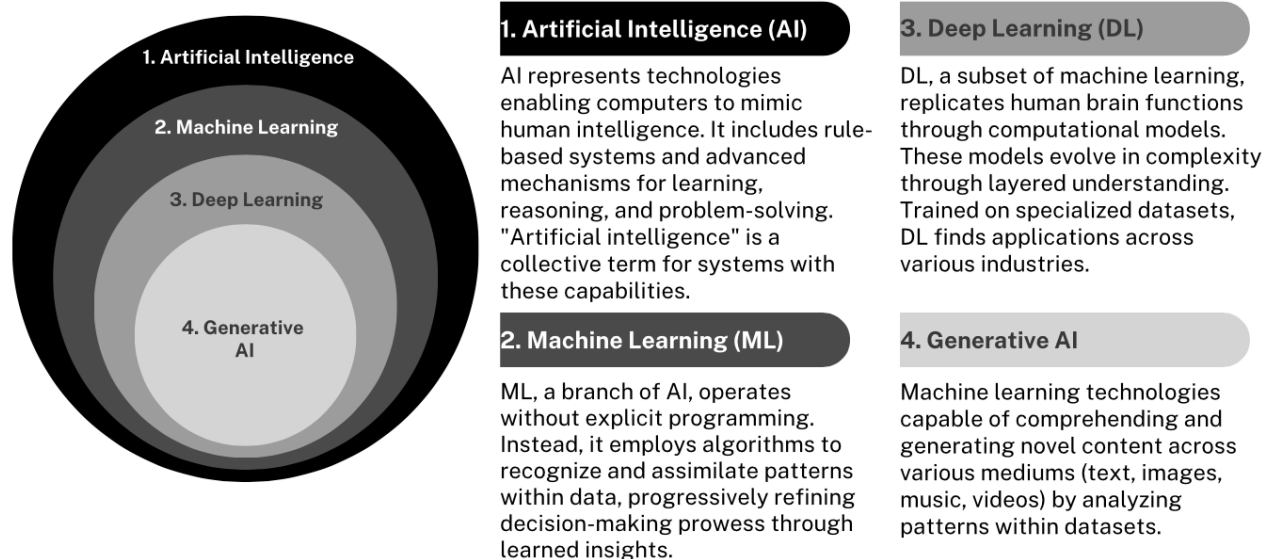
In contemplating AI's broader influence, Agion et al. (2017) introduce the idea that AI could revolutionize the creative process, as the capacity of AI to solve complex problems and amplify creative efforts opens new avenues for ideation and technological advancement.

Amidst these challenges, Cockburn et al. (2017) propose a cyclical relationship between Generative Pre-trained Transformer (GPT) and application sectors. This relationship, characterized by a reinforcing cycle of innovation, holds the promise of a systemic economy-wide transformation. The acceleration of innovation across sectors becomes a driving force, potentially mitigating challenges posed by AI while amplifying its positive impact. (Cockburn et al., 2017)

As previously mentioned, artificial intelligence is defined differently across various fields and by numerous academics. Figure 1 below illustrates AI and its related models, highlighting their interconnections and offering brief definitions.

Figure 1

Artificial Intelligence and its core models



Note. The data sources include Brynjolfsson et al.'s (2023) study and the report titled "*The Economic Opportunity of AI in Estonia*" (2024).

This study will be specially focused on Generative AI (with the status of the first quarter of 2024), especially ChatGPT. Generative AI, introduced to the public in 2022, can process and understand various formats like text, code, images, sound, and video to create new content. Trained on vast datasets, these AI models develop a broad understanding of text,

visuals, code, and audio. This technology is versatile and applicable across numerous industries and fields. (“The Economic Opportunity of AI in Estonia,” 2024)

In the rapidly evolving landscape of marketing communication, the debate over whether humans or AI develop marketing content more effectively has captivated scholars and practitioners alike, prompting a closer examination of the nuanced dynamics between human creativity and AI capabilities. This exploration delves into the role of AI as a transformative force in marketing, offering unprecedented capabilities that promise to enhance various marketing tasks. However, criticisms of AI-generated content, often seen as dull, contrast sharply with the perception of human-generated content, which is usually regarded as vibrant, creative, and emotionally rich.

1.2. Possible advantages and disadvantages of AI contribution to marketing

This chapter aims to navigate the pros and cons of leveraging AI tools in marketing, highlighting both the potential of AI in changing marketing practices and the indispensable value of human insight in crafting content that resonates on a deeper emotional level. This exploration is particularly pertinent as it aligns with the research study's second focal area: investigating the extent to which AI contributes to the quality of marketing content.

In the field of contemporary marketing strategy, the role of AI has assumed increasing significance. Major corporations such as Google, Rare Carat, Spotify, and Under Armour now exemplify a growing trend, utilizing AI-powered platforms to enhance their marketing effectiveness. This strategic shift not only refines customer engagement across diverse marketing channels but also underpins predictive analytics and process automation. (Vlacic et al., 2021) The incorporation of AI in brand management, customer relations, and strategic marketing offers numerous opportunities through diverse tools, including chatbots, customer journey optimization, content research and creation, customer relationship management, image recognition, search engine optimization, personalization, profiling, and strategic planning (Mustak, 2021).

Recent studies have outlined several advantages of integrating AI into marketing. The revolutionary potential of generative AI in content marketing is, for example, accentuated by Wahid et al. (2023), who state that generative AI, including tools like ChatGPT, revolutionizes content marketing by allowing marketers to detail their content needs precisely. Through a conversational interface, marketers can refine their content specifications, ensuring outputs align with their strategic goals. This capability extends to

various content forms—text, visual art, videos, and music—offering marketers versatile tools to tailor their strategies and meet specific objectives efficiently. (Wahid et al., 2023)

When utilizing AI for content creation or other tasks, understanding how individuals engage with AI is crucial. Dell'Acqua et al. (2023) highlighted its significance, revealing that user approaches influence work outcomes. They noted that within a specific task range, AI enhanced performance, but beyond it, excessive reliance on AI led to errors. User proficiency in navigating this spectrum varied. Two key approaches emerged: 1) Centaur behavior: users allocate tasks between themselves and AI based on strengths, distinguishing tasks requiring human input from those AI can handle. 2) Cyborg behavior: users integrate human and AI efforts deeply, engaging in collaborative problem-solving. For example, they may initiate tasks for AI completion or work closely on task execution. (Dell'Acqua et al., 2023) Understanding these interaction patterns illuminates effective AI utilization and its impact on task performance and quality.

Through AI collaboration, there's an opening for fresh, inventive methodologies that could reshape how marketing objectives are achieved, offering a blend of efficiency, creativity, and strategic depth previously unattainable through standard practices. Moreover, AI's capability extends to revolutionizing advertising creativity. An exemplary case is Nike's 2023 campaign "Never Done Evolving," which secured the Cannes Lions Grand Prix in collaboration with the agency AKQA. This campaign utilized AI's prowess and advanced machine learning techniques to analyze archival footage of Serena Williams, spanning her two-decade-long career. By generating 130,000 hypothetical games and 5,000 matches, the campaign offered a unique glimpse into Williams' evolution, highlighting her continuous challenge to the future through a simulated "match of the ages," which was broadcast via YouTube live stream to an audience of 1.69 million people. The campaign was described as the "epitome of digital art, showcasing what digital artistry is today – a combination of creativity, technology and purpose." (AKQA, n.d)

Similarly, Huang & Rust (2021) acknowledge AI's significant contribution to enhancing operational efficiency in marketing, where 'mechanical' AI streamlines repetitive tasks, and 'cognitive' AI, exemplified by AI-driven content creation tools, fosters synergy between automation and creative processes. Machine Learning (ML)-based AI techniques also excel in extracting insights from vast and unstructured data, such as customer reviews, social media interactions, and clickstream data. This knowledge serves as the foundation for more effective marketing strategies, including personalized recommendations, targeted

advertising, and dynamic pricing. Machine learning further aids in mapping customer purchase journeys and establishing real-time context-sensitive decision support online. These techniques are invaluable for optimizing marketing campaigns, enhancing customer engagement, and bolstering customer retention. (Ma and Sun, 2020)

As highlighted by Haleem et al. (2022), the integration of AI into marketing strategies empowers brands to respond dynamically to user demands, enabling the creation of highly engaging and hyper-relevant content and advertisements. The author of this work observes that engaging with users on social media has become a race against time, where the prompt response to user requests and comments is crucial. This urgency compels marketing professionals to employ AI tools like ChatGPT, enhancing efficiency and enabling the quick production of relevant content.

Haleem et al. (2022) have also found that marketers leverage AI's data-driven algorithms to strategically personalize content, determining the optimal timing and channel for message delivery, ensuring a seamless and engaging customer experience, since what comes to time and performance of work duties (especially, for example, data analysis or graphical design) AI surpasses human capabilities by being able to generate visuals, content ideas or texts, within seconds. Anantrasirichai and Bull (2021) shed light on the creative applications of ML-based AI, showcasing its impact on content creation, information analysis, and data compression. The infusion of ML-based AI in marketing strategies enables marketers to push the boundaries of creativity, enhancing the richness of marketing content and its effectiveness (Anantrasirichai and Bull, 2021).

However, while AI proves instrumental in enhancing various marketing functions, it does not completely replace the need for distinct human attributes, such as strategic acumen and decision-making (Vlasic et al., 2021). These human qualities remain indispensable in shaping successful marketing strategies and fostering meaningful customer relationships. Supporting this perspective, a study by McKinsey (2023) demonstrates the potential of AI to revolutionize the daily practices of marketers, with a pronounced emphasis on the adept utilization of AI tools to construct effective marketing content.

An exemplary application of AI's impact on content marketing is evident in the enhancement of email marketing campaigns, as highlighted by Haleem et al. (2022). AI expedites and refines the process, offering a significant leap forward in the creation of compelling email content. Natural language generation employed by AI tools excels in composing email subject lines, capturing a brand's unique voice through meticulous data

analysis. The result is email copy that resonates with diverse audience segments, creating personalized recommendations that drive higher conversions and engagement. (Haleem et al., 2022)

However, the adage "the devil lies in the details" aptly describes the skepticism surrounding AI-generated content. Thus, negative impacts are also found in creating content with AI tools. Darda et al. (2023) focused in their study on how people react to the text generated algorithmically when they are indistinguishable from human-generated texts and they found that people assign a lower value to AI-generated texts compared to original texts, indicating a bias against content created by artificial intelligence. This skepticism extends to the authenticity of AI-generated versus human-made content, with Wahid et al. (2023) noting that customers who value authenticity tend to favor content created by humans over AI-generated content. The scholars propose that when customers highly value authenticity, their engagement with AI-generated content may decrease due to the perceived lack of authenticity.

Nonetheless, an insightful study by Mou et al. (2020) conducted an experimental survey with American and Chinese participants to evaluate perceptions of AI-generated content in literature and art. The findings indicated that while American participants considered human authors more capable, both groups acknowledged AI's ability to create meaningful content. Cultural differences significantly influenced perceptions, with American participants being more skeptical of AI-generated content than their Chinese counterparts. This suggests that attitudes toward AI-created content and its perceived quality may vary based on cultural context and the language of creation. Extending this notion, the author of this work notes that the efficacy of AI tools, like ChatGPT, also depends on the language of content creation. English, with its broad AI support, offers a more seamless experience than languages with fewer resources, such as Estonian. This suggests that perceptions of AI-generated content are influenced by both cultural contexts and linguistic factors, underscoring the importance of enhancing AI's linguistic versatility.

There have also been studies that have found that, overall, depending on the content and context, there is no difference between users' perceptions of AI and human-generated content. For example, Kim et al. (2020), presented findings suggesting that users perceive no significant difference in quality, readability, and credibility between human-generated and AI-generated content. Their study underscores the effectiveness of AI in content creation, challenging preconceived notions about the superiority of human-generated content in certain

marketing contexts. Thus, it can be said that the AI vs. human intelligence content creation results and its perceivness depends on a lot of factors and even from cultural differences, as enclosed previously.

The integration of AI has brought about a transformative impact on marketing practices. Marketers now possess the ability to gain thoughtful insights into customer needs through AI, enabling comprehensive data analysis and a reorientation of their approach towards a customer-centric paradigm. This adoption of AI has ushered in a redefinition of the core competencies expected of marketers. In addition to their traditional creative and content creation responsibilities, marketers are now required to cultivate proficiencies in data analysis and reporting. (Vlacic et al., 2021)

In essence, AI's impact on marketing is profound. It necessitates that marketers acquaint themselves with the nuances of data analysis, understand AI tools, and effectively leverage AI-derived insights for the creation of personalized marketing content. It is crucial, however, to emphasize that human creativity and empathy remain essential facets of the marketing landscape. Marketers must continue to excel in the craft of creating compelling narratives and establishing emotional connections with their audience. (Huang et al., 2019).

The effectiveness of AI-generated content significantly hinges on the manner of its utilization - specifically, the extent of the content creator's reliance on AI tools and their method of application. Huang et al. (2019) emphasize that AI can play a pivotal role in automating routine tasks, such as handling customer service inquiries and managing social media interactions. This automation allows human staff to redirect their efforts toward more intricate and empathic human-to-human tasks (Huang et al., 2019). Campbell et al. (2020) emphasize the vast potential of AI in marketing but caution that realizing this potential is a complex task. Campbell et al. (2020) argue that the successful integration of AI in marketing requires a delicate balance between AI and human intelligence. Forrester (2017) supports this perspective, asserting that leveraging the unique strengths of both AI and humans results in a more seamless end-to-end consumer experience. But, for AI to help with marketing tasks with quality results, it needs clear instructions and lots of good data provided by humans to understand what companies want, what customers like, and what has worked in the past (Haleem et al., 2022). AI tools integration into marketing cannot work if managers lack a fundamental understanding of AI systems (Mustak, 2021). AI requires time, correct and clear instructions for quality results and seamless integration.

These challenges also encompass the imperative for marketers to undergo comprehensive training in various AI technologies and processes, determining the optimal balance between AI-driven and human-executed tasks, and making informed decisions about when to automate actions rather than relying solely on human judgment (Mustak, 2021). The author thinks that this can be the main problem of crafting marketing content with the help of AI – behind the content creation, there has to be an expert who, first of all, knows how to use AI tools accurately (i.e., use the right tools dependent on the task, give correct prompts, etc) and secondly, the expert can evaluate the accuracy of AI provided inputs in order not to distribute conflicting marketing content that could harm the marketing and business objectives. Consequently, the dynamics of jobs are evolving, demanding that workers learn to collaborate effectively with AI. Instead of fearing job displacement by AI, employees should consider AI as a team member, focusing on tasks requiring thinking, while human workers excel in tasks involving sensing and empathy. (Huang et al., 2019).

Moreover, research has revealed a notable difficulty among readers in distinguishing between texts produced by AI and those written by humans, highlighting a challenge in identifying the source of written material (Darda et al., 2023; Clerwall, 2017). This raises a concern in the long term as AI-generated text has the potential to spread misinformation and increase biases, especially when readers are unable to distinguish between human-generated and AI-generated content. (Darda et al. 2023)

AI and human intelligence in marketing unveil a blend of technological innovation and creative flair. While research supports AI's capability to revolutionize marketing through automation, data analysis, and content generation, concerns regarding authenticity and emotional engagement with AI-generated content persist. Thus, the quality of AI in marketing hinges on cultural context and specific applications, advocating for a strategic combination of AI's technological strengths and the unique value of human creativity.

1.3. Scholars' and marketing professionals' insights on content marketing KSFs

The success of a content marketing relies on different elements, such as the intended audience, the context, and objectives of the content. A well-designed content that considers the success factors of the content marketing has several benefits that businesses can benefit from. Kou and Xiao (2020) discovered in their study that marketing content on social media exerts a robust competitive impact, amplifying users' focus on and appraisals of products. This implies that such content possesses the potential to heighten consumer interest and foster a positive impact on product perceptions, potentially resulting in heightened sales and

revenue for businesses. Nevertheless, the precise consequences of marketing content can fluctuate based on factors like message content, the target demographic, and the communication context. (Kou and Xiao, 2020)

In addition to Kou and Xiao's (2020) study, Kidd et al. (2019) researched how marketing content works in the field of conservation and found that when incorporating different key success factors into the content strategies, conservation organizations can heighten the effectiveness of their content, fostering behavior change and garnering support for conservation initiatives. As a success factor, Kidd et al.'s (2019) findings align with Kou and Xiao's study results, admitting that several factors can influence the effectiveness of marketing content.

As effective content marketing success factors, Kidd et al. (2019) identified several crucial factors contributing to success. First and foremost is the alignment with values and beliefs, involving the crafting of content that resonates with the target audience's core values and beliefs. Clarity and simplicity in language use were also highlighted as essential, emphasizing the importance of straightforward communication for easy comprehension. Additionally, the inclusion of actionable information emerged as a key success factor, urging the provision of specific and achievable details regarding the desired user actions. The study emphasized the significance of visual enhancement through the incorporation of visual aids such as images or infographics to heighten the overall impact of the content. Furthermore, leveraging social norms and peer influence was recognized as a powerful strategy, encouraging individuals to adopt conservation-supportive behaviors through the influence of societal expectations and peer pressure. (Kidd et al., 2019)

Message design effectiveness has also been studied via different message design models to see how content is affected by linguistic characteristics and how words and sentence structure complexity affect content perception. For example, Averbek and Miller (2013), who explored message design effectiveness as a function of syntactic and lexical complexity, compiled a study that suggests that individual differences, cognitive complexity, integrative abilities, and differentiation skills play a role in how people perceive and prefer content based on their lexical and syntactic complexity. Lexically complex messages may be preferred by those with more experience and interest in complex ideas, while syntactically complex messages may be favored by individuals with strong integrative abilities. (Averbek and Miller, 2013)

Considering Averbach and Miller's (2013) results, it can be said that adapting marketing content to suit audience preferences is crucial, considering whether they lean towards simpler or more complex content. People with strong integrative abilities find complex sentence structures more convincing, as they provide a clear context for integrating information. Those with good differentiation skills may prefer simpler sentences, as they require less background information. Customizing content based on the audience's experience and reading comprehension levels is vital for effective communication. Individuals who think more deeply about content are more likely to appreciate messages with complex words, as they encourage abstract thinking and provide an engaging experience for this audience. (Averbach and Miller, 2013)

Regarding language and tone of voice aspect, Stephen et al. (2015), who mainly concentrated their study on the research about Facebook posts, found that successful marketing content assets are those that are relevant to the brand, do not come across as an overt advertising-like persuasion attempt, and are not overly polished or fluent in terms of the clarity of the message being conveyed. Thus, it can be said that the communication tone of voice has to be tactical and aligned with the brand's audience.

Just as academics have different paradigms, scholars, and professionals may also hold varying perspectives on the key factors that contribute to content marketing. Marketing professionals Holliman and Rowley (2014), who researched marketers' perceptions of digital content marketing best practices state that to create valuable content, brands must adopt a "publishing" mindset, which involves understanding the information needs of the target audience and their decision-making process. They identified valuable content through four key dimensions: usefulness, relevance, compelling nature, and timeliness. This underscores the importance of aligning content with the audience's needs and timing it appropriately. (Holliman and Rowley, 2014) Moreover, this shows that marketing professionals' practices are aligned with that aspect which has become apparent with academics findings about marketing success factors (ref. from previously mentioned Kidd et al. (2019); Averbach and Miller (2013); Kou and Xiao (2020)).

Content field experts and coaches Jefferson and Tanton (2013) have written an award-winning valuable content marketing book, where they outline five essential qualities for effective content in the context of a newsletter: 1) Clarity of purpose; 2) Authenticity; 3) A genuine and sincere voice; 4) Relevance to the intended audience; 5) Effective and cohesive

design. These characteristics build upon the principles set forth by Holliman and Rowley by emphasizing authenticity and design as crucial aspects of content value.

Similarly to those aspects exploring content creation, digital marketing experts Smith and Chaffey (2005) outline crucial success factors, especially in the example of newsletters and email marketing. They highlight the evaluation of email creativity, encompassing design, layout, color, images, and copy, which must align with relevance for a precise fit to recipients' needs. The Incentive factor is crucial, delving into recipients' motivation for clicking hyperlinks, often through B2C prize draws. This collaboration with creative elements enhances overall content appeal and effectiveness. (Smith and Chaffey, 2005)

Beyond creativity, targeting and timing become intertwined, enhancing relevance through tailored content and synchronizing email receipts with other marketing communications for a cohesive strategy. Copy, part of the creative process, strategically places hyperlinks for enhanced engagement, considering attributes like subject line, addresses, and format for a holistic approach. (Smith and Chaffey, 2005)

Furthermore, Smith and Chaffey (2005) advocate the continued relevance of the AIDA model (Attention, Interest, Desire, Action) for marketing content creation, despite its age of over 100 years. This model complements the previously discussed strategies by providing a framework for understanding how content can guide consumers through the decision-making process. Table 1 visually represents the combined success factors of marketing content as identified by both academics and practitioners.

Table 1

Success factors of the marketing content and AI opportunities to support them

Success factors	Success indicators of the marketing content	Explanation of the success factors	Scholars	How can AI support success factors?
Content relevance	Relevant and useful	Level how suitable the content is (i.e. considering the audience). Does the offer and creativity of the e-mail meet the needs of the recipients?	Holliman and Roley (2014); Jefferson and Tanton (2013); Smith and Chaffey (2005); Stephen et al. (2015)	1. Tailor promotional content for personalized communication (Huang and Rust, 2021). 2. Formulate positioning strategies that connect with customers on a personal level (Huang and Rust, 2021). 3. Create personalized promotional offers and advertisements (Campbell et al., 2020). 4. Aid marketers in identifying content that aligns with users' preferences (Haleem et al., 2011).
	Compelling, Incentive	Presence of benefit, which the content recipient will gain.	Holliman and Roley (2014);	

Creativity and Originality	Creativity	The ability to generate novel and inventive concepts, or to create something innovative and imaginative.	Anantrasiric hai and Bull (2021)	Generating content based on a brief idea provided by the user. (Anantrasirichai and Bull, 2021)
		This assesses the design of the e-mail including its layout, use of color and image, and the copy.	Smith and Chaffey (2005)	
Layout and Design	Simple design.	The content should be visually appealing, using images, videos, or other visual aids to enhance the impact of the message.	Smith and Chaffey (2005)	Content creation (both text and images harmony and their placement, and performance). Campbell et al., 2020)
	Usage of other visual elements (if relevant to the asset)		Kidd et al. (2019)	
Clarity and Actionability	Clear aim	The communication should be straightforward and easily comprehensible.	Jefferson and Tanton (2013); Kidd et al. (2019)	Leverage emotional data and customer analytics to comprehend the current and prospective desires and needs of both existing and potential customers (Huang and Rust, 2021).
	Clarity	The apparent clarity and smoothness of the message conveyed in the post.	Stephen et al. (2015)	
	Authenticity	Voice; level of tone to which the message is perceived as “advertising”	Jefferson and Tanton (2013); Stephen et al. (2015)	
	Actionability	The content should provide specific guidance about the actions that user should take.	Kidd et al. (2019)	
Grammar and language	Readability	Customizing content based on the audience's experience and reading comprehension levels is vital.	Averbeck and Miller (2013)	1. AI tools use natural language generation to compose email subject lines much better than humans. (Haleem et al., 2011) 2. Language-based AI is rapidly improving, "learning" from previous experiences and automatically optimizing to create an even better experience the next time. (Haleem et al., 2011)
	Copy	Clear grammar structure and style.	Smith and Chaffey (2005)	
Personalization	Target audience	Crafting the content to resonate with the values and beliefs held by the target audience	Kidd et al. (2019)	1. Use thinking AI to recommend the best target segments; (Huang and Rust, 2021) 2. Tailor communication based on customer emotional preferences and reactions (Huang and Rust, 2021) 3. Classification and clustering of customers into distinct segments (Campbell et al., 2020) 4. Creating personalized content targeted to individual consumers (Campbell et al., 2020)
		Adapting marketing content to suit audience preferences is crucial.	Averbeck and Miller (2013)	
		Targeting is related to the relevance. Is single message sent to all customers on the list or are e-mails tailored to audience-specific and sent to different segments?	Smith and Chaffey (2005)	

Note. The data presented is derived from a literature review. Specific sources cited in the "scholars" cell indicate the referenced scholarly works.

Evaluating content marketing success factors involves strategically identifying and measuring key performance indicators (KPIs). It's essential to recognize the abundance of KPIs available and select those most relevant to objectives. Each KPI should be tied to a specific goal, whether it's enhancing brand awareness or driving sales. Measuring KPIs often involves analyzing metrics such as audience engagement, website traffic, conversion rates, and social media interactions. This can be done using various tools such as Google Analytics, social media analytics platforms, and CRM systems. Additionally, surveys, focus groups, and customer feedback can provide qualitative insights into content effectiveness. Regular monitoring and analysis of KPIs allow marketers to assess performance, identify areas for improvement, and make informed decisions to optimize content marketing strategies. (Murray, 2019).

In the context of this study, where marketing newsletters are being created experimentally, the focus is not on measuring parameters such as open rates, click-through rates, or other CRM performance metrics. Instead, the study is centered on evaluating content characteristics and marketing newsletters are used merely as an example asset of a regular marketing campaign. The e-newsletter is designed around a fictitious case and company, and there is no real-world distribution of the newsletters. The core objective of this experiment is to assess the quality of the marketing e-newsletter itself, particularly in relation to the use of AI tools in content creation. Thus, the evaluation criteria are limited to 13 KSFs reflected in Table 1, with the primary goal being to determine whether AI tools contribute to the quality of crafted newsletters.

The theoretical overview established in earlier chapters lays the groundwork for empirical inquiry, particularly in understanding the origin of the set research questions. By clarifying the origins of these inquiries, the discussions on content quality and the integration of AI in marketing provide context for the subsequent investigation. As the study transitions to the methodology chapter, it delves into the experimental design and evaluation process, where the empirical testing of research questions takes place. This empirical exploration offers insights into the dynamics of human-AI collaboration in marketing, providing valuable contributions to the field.

2. Methodology

2.1. Experimental design

The creation of a newsletter serves as a prime illustration among the diverse marketing assets employed to assess content quality and the content creation process while comparing the content made solely by humans versus in collaboration with artificial intelligence. The selection of crafting a newsletter as an appropriate experimental task was driven by its feasibility to be completed within a one-hour timeframe. Furthermore, the experimental group consisted of marketing professionals who were well-acquainted with marketing newsletters and their production. The primary objective of this experiment is to assess and compare the quality of content produced by humans alone versus content created through human collaboration with artificial intelligence. Experiments are deemed an appropriate methodology for achieving this objective, since, as noted by Cook et al. (1979), experiments play a dual role: they validate existing theories and generate new ones through empirical evidence while also enhancing the accumulation of knowledge in a field by building on previous research and extending our understanding of related concepts. Elmes et al. (2013) add to this by also stating that experiments study how changes in one or more factors affect outcomes. This fits this study design, as the aim is to see how different factors (ability to use or not use AI tools) affect the quality of crafted content.

In this context, the e-newsletter is fashioned around a fictitious case and company. Therefore, this study does not involve the real-world distribution of the e-newsletters, nor does it measure parameters such as open rates, click-through rates, or other customer relationship management performance metrics.

The core focus of this experiment is on the development of a marketing e-newsletter. Nevertheless, it is important to emphasize that the purpose of this endeavor is not to gauge the real-world efficacy of the newsletter; rather, it is designed to assess the quality of the content itself. This assessment centers on the evaluation of content quality and seeks an answer to the question if AI tools will support the quality of crafted newsletters or not.

2.2. Conducting the experiments

Before initiating the experimental procedures, preparatory steps were done. In the context of experiments, a set of evaluation criteria was derived from an extensive literature review, encompassing both academic and practitioner perspectives, as outlined in Table 1. The task of creating a holistic framework for newsletter content assessment was notably complex, given

the lack of a universally recognized standard in this area. The primary aim was to develop a framework that would not only be relevant but also comprehensively applicable to the experts engaged in the assessment process. This type of theoretical analysis complements experiments by clarifying treatment mechanisms, guiding research questions, and improving reporting, making it a valuable and recommended approach (Cook et al., 1979).

The standard method for evaluating the content validity of the instrument involves consulting experts (Sireci, 1998). Thus, as an initial measure, the author sought to validate the devised criteria by consulting with three experts renowned for their profound knowledge and extensive experience in the marketing sector, specifically in marketing newsletters. Expert judgment involves subject matter experts evaluating items based on their relevance and representativeness within the content domain being tested (Sireci, 1998).

Each expert has more than five years of dedicated experience in the field, providing a solid foundation for their insights and validations. Their endorsement of the criteria served as a validation of its applicability and relevance to the framework being developed.

Despite affirming the initial set of criteria, the experts also provided valuable feedback, suggesting enhancements and additions to enrich the framework. These suggestions were incorporated, culminating in a refined list of criteria. The enhanced list, inclusive of the experts' contributions, is presented in Table 2. This collaborative approach not only validated the original framework but also ensured its expansion and adaptation to encompass a broader range of evaluative dimensions. This ensured that the final evaluation framework was not only theoretically robust but also practically relevant and sensitive to the nuances of effective newsletter marketing. This allowed for qualitative validity, as the accuracy of the findings was checked by employing certain procedures (Creswell, 1994).

Firstly, experts recommended segregating design and visual appeal from layout considerations. This separation aimed to assess whether there were deliberate design elements, such as header visuals, and how the layout employed alignment, paragraphs, and subheadings. A second aspect proposed by the experts involved the introduction of distinct evaluation criteria for the main message and purpose of the newsletter. This criterion seeks to evaluate whether the reader promptly grasps the primary point of the newsletter. Differentiating from clarity and readability criteria, the main messages criterion focuses on gauging the conveyance of key ideas.

An additional criterion, not explicitly identified in the literature review, is the engagement level of content, communication tone likeliness, communication tone of voice, and

credibility. The recommendation was to include content engagement level as a separate criterion to evaluate the overall appeal and interest generated by the content. Assessing communication tone likeliness involves perceiving the communication style and comparing personalized human tone to potentially clinical machine-generated tone. Experts emphasized that a consistent tone of voice throughout the newsletter is essential for communication.

Furthermore, the criterion of credibility was introduced to evaluate whether readers perceive the content as authentically human-written or potentially generated by AI tools. This aspect is particularly intriguing, as it allows for an analysis of how readers interpret the presence of AI in content creation.

Table 2

Experiments evaluation criteria for the experts

Evaluation Criteria for Experiment	Assessment compliance with the criteria
Design and Visual Appeal	Assess the overall visual appeal. Were any additional visual elements (icons, graphs, pictures) incorporated beyond the text?
Layout	Review the layout: alignment, paragraphs, subheadings, whether there are several topics or one, and whether there are several sections (left, right, etc.).
Clarity and Readability	Evaluate the clarity and readability of the newsletter's content, ensuring that it is easy to understand. How much text has been presented in the visual and in the text fields (important in the context of disabled people and in cases where Outlook/Gmail is not showcasing the visual)?
Main message/purpose	Can you immediately understand what the main purpose of the newsletter is, and what is expected from the reader. Measure the conveyance of the main idea.
Grammar and Language	Check for the quality of written language, including grammar, spelling, and overall language proficiency. Ensure that the text is error-free and professionally written.
Content Relevance	Assess how well the content of the newsletter aligns with the target audience and marketing objectives. Consider whether the content is informative, engaging, and likely to resonate with the audience.
Content Engagement level	How engaging and interesting is the content – assess whether the newsletter captures readers' attention effectively? Does the content make the reader notice the CTA button?
Creativity and Originality	Evaluate the creativity and originality of the newsletter's content, including headlines, imagery, and storytelling. Consider whether the content stands out.
Communication Tone of Voice	Is the reader addressed constantly in the same way and copywriting done in a uniform style in terms of language use?
Communication Tone Likeliness	Rate how you like the communication tone of this newsletter.
Actionability	Assess the CTA and its relevance – is the CTA button text short and accurate?
Personalization and Segmentation	Evaluate the degree of personalization and segmentation in the newsletter content. Are there elements that cater to specific segments of the audience?
Credibility	Evaluate the credibility level of the content and think if you, as a reader, believe that this letter was written to you by a human, without the help of any AI tools.

Note. Data is compiled based on experts' judgment feedback and literature review (Table 1).

Table 2 presents the list of evaluation criteria, incorporating the insights provided by the experts. This refined list served as the foundation for assessing newsletters in the experiments.

The evaluation criteria in the table prioritize aspects of a newsletter based on how people typically perceive and judge content. It begins with design and visual appeal, assessing aesthetics and the use of visual elements. Layout, clarity, and readability follow, focusing on organization and ease of understanding. The main message and grammar are then evaluated for clarity and correctness. Content relevance, engagement, and originality are considered next, followed by tone consistency and likability. Actionability, personalization, and credibility are also assessed. These criteria mirror the natural sequence of content perception and judgment.

Before heading to conduct the experiments, needed preparations were done. As a first step, the author compiled briefs for the experiments. Given the presence of two experimental groups, two distinct briefs were required: one for conducting newsletters using AI tools and another for conducting them without AI tools. According to Creswell (1994) in experimental research, this distinction is crucial because it allows us to investigate whether a specific treatment affects study outcomes. This assessment involves administering the treatment to one group while withholding it from another, ultimately evaluating the scores and outcomes of both groups (Creswell, 1994).

The main aspect of consolidating the briefs was to think of a universal topic, about which participants would feel comfortable to write about – it was important to not choose niche or unique topics for the creation to remove potential risks of the topic being unknown or uncomfortable for the users. Thus, as all of the participants were marketing professionals, the author chose the content creation to promote a fictive upcoming marketing conference, indicating in the brief the primary key elements like the name of the event, keynote speakers, date, and location. Participants were tasked with crafting newsletter content that was both engaging and informative, tailored to attract as an audience marketing managers, professionals, and interested parties. Thus, the brief also specified the target audience for the newsletter.

One part of the brief was also related to the experiment participation, ensuring to the participants that their identity will remain anonymous, participation is completely voluntary, and submitted work and personal information will be treated strictly confidential. By participating, users gave informed consent to the use of their data by these principles.

Once the briefs were ready, they were also validated by one expert to make sure that they were relevant and easy to understand with enough information for the newsletter creation. Meanwhile, an active search for people was going on for the experiment. The criterion for the

sample was to find people who have worked in the field of marketing and communication for at least 1 year. In the context of this study, the researcher used purposeful sampling, since individuals were selected as they had experience with the experiment topic (Creswell, 1994). To recruit willing participants for the experiment and encourage their involvement in newsletter creation, all individuals who took part in the experiment were offered a 10-euro gift card as an incentive.

The experiments were conducted during the first weeks of February 2024. All participants had a time limit of 1 hour for content and design creation. The brief was shared with all participants immediately before the start of the experiment (approx. 10.-15. minutes before the start) to avoid technical failures.

A total of 18 newsletters were individually crafted by 18 distinct participants divided into two experimental groups. The first group, comprising nine individuals, did not utilize any AI tools during the creation process, whereas the second group, also consisting of nine participants, had access to a diverse array of AI tools and platforms. To maintain a comprehensive and verifiable record of the prompts and guidance employed in utilizing the AI tools, ChatGPT served as the primary AI platform. Utilizing an anonymous URL link, participants interacted with ChatGPT to generate content for their respective newsletters. Thus, both groups produced nine newsletters, with one group relying solely on human effort and the other benefiting from the assistance of AI tools.

After conducting the experiments, participants in both experimental groups were asked to complete a brief questionnaire. This was done to gather insights into their experiences with marketing and AI tools. Participants in the experiments were queried about their experience in the field of marketing, their feelings about creating the newsletter, their satisfaction with the result on a scale of 1 to 10, their overall experience with AI tools, and how they learned to use these tools.

2.3. The evaluation and calculation process of the newsletters

This research employs a mixed methods approach, also referred to as multimethod or synthesis research. It combines both quantitative and qualitative methodologies. According to Creswell (1994), utilizing both methods allows researchers to leverage the strengths of both qualitative and quantitative research. Additionally, Creswell (1994) highlights that when addressing complex problems, relying solely on either quantitative or qualitative approaches is insufficient. In this study, both research methods are mixed, as the data analysis and collection are connected.

After the experiments were conducted, the author combined them into Qualtrics, which later was compiled into a questionnaire for the experts (ref. Figure 2 for process flow). The three experts who contributed to the initial validation of the evaluation criteria continued their involvement in the phase dedicated to the newsletter assessments. To enrich the evaluative process with further perspectives, the researcher engaged an additional expert. This individual, mirroring the qualifications of the preceding experts, possesses over five years of experience in the marketing and communication sector with a specialization in newsletter marketing.

The Qualtrics survey facilitated the assessment of all 18 newsletters against the criteria delineated in Table 2, employing a matrix-style format. The criteria were evaluated by the experts using a structured approach outlined in the evaluation guide provided. Each criterion, such as Design and Visual Appeal, Layout, Clarity and Readability, Main message/purpose, Grammar and Language, Content Relevance, Content Engagement level, Creativity and Originality, Communication Tone of Voice, Communication Tone Likeliness, Actionability, Personalization and Segmentation, and Credibility, was assessed based on specific sub-elements within each category. For instance, under the criterion of Design and Visual Appeal, aspects such as overall visual appeal, aesthetics, use of visual elements, and layout were considered. Similarly, each criterion in the evaluation table was broken down into relevant sub-elements to ensure a comprehensive evaluation of the newsletters. Each of the 13 criteria was rated on a scale ranging from 1 to 5, which marked scores from 'poor' to 'excellent'.

Additionally, experts were asked to assign an overall score to each newsletter on a scale from 1 to 10, with 1 representing the lowest possible score and 10 denoting the highest. To ensure the integrity of the evaluation process, the newsletters were presented in a randomized order. This approach effectively concealed whether each newsletter was created with or without AI assistance, thereby eliminating potential bias in the experts' assessments. Additionally, each expert was required to evaluate the newsletter using a previously identified KSFs framework (Table 2), and had to indicate in the x-y diagram whether the newsletter was standard and forgettable or innovative and memorable and whether it imposed a high cognitive load or a low cognitive load on the reader.

The evaluation period for the 18 newsletters spanned from the 23rd of February to the 6th of March. During this interval, a total of 72 observations were recorded. This quantity of observations originated from the evaluation of 18 distinct newsletters by four different experts. To elucidate the formation of the 72 observations, it's essential to understand that

each expert evaluated all 13 key success factors. Thus, the calculation for the total number of observations is derived from multiplying the number of newsletters (18) by the number of experts (4), resulting in 72 (18 newsletters x 4 experts = 72 observations). This methodology ensures a comprehensive assessment from multiple perspectives, enriching the validity of the evaluation outcomes.

Concurrent with the expert's evaluation of the newsletters, the author undertook a parallel assessment using ChatGPT. In this study, ChatGPT is considered an additional expert, embodying a Cyborg role as per Dell'Aquila et al. (2023) study approach, where users closely integrate tasks with AI – rather than simply assigning tasks, the author worked together with AI on a deep level by collaborating with ChatGPT for newsletters evaluation. Identical evaluation guidelines were provided to ChatGPT as for the “human experts”, including detailed criteria explanations. ChatGPT then assessed all 18 newsletters against the 13 criteria. Importantly, the author refrained from disclosing to ChatGPT which newsletters were AI-generated, ensuring an unbiased evaluation process.

After gathering data from the evaluations conducted by all experts, the researcher performed a quantitative content analysis. This involved calculating the average rating for all 13 identified success factors (as listed in Table 2), incorporating data from experts and ChatGPT observations. Furthermore, to assess the diversity of expert opinions, the coefficient of variation for each success factor was computed, highlighting the extent of agreement or discrepancy among expert assessments for each category. Nevertheless, it is essential to recognize that the study's scope and the generalizability of findings are significantly limited by the small number of observations. Hence, it is imperative to collect additional data to derive broader conclusions from the findings.

To calculate the coefficient of variation, Excel formulas were employed. Initially, the mean and standard deviation were computed for each KSF. Following the determination of the mean and standard deviation, the coefficient of variation was derived by dividing the standard deviation by the mean and subsequently multiplying the result by 100 to express it as a percentage.

In parallel, qualitative analysis was employed to examine the responses generated by ChatGPT during the experiment, as well as to analyze participants' answers to the brief questionnaire. This qualitative analysis involved compiling and consolidating the prompts provided by experimentees utilizing ChatGPT into an Excel file. Subsequently, the texts were analyzed, enabling the categorization and synthesis of the tasks for which users employed

ChatGPT (see Figure 3). Additionally, the content of participants' questionnaire responses was examined, contributing to the compilation of an overview detailing participants' backgrounds and experiences (see Table 4). This process unveiled correlations between participants' marketing backgrounds, their interactions with AI tools, and the evaluations provided by experts.

This dual-method approach facilitated a comprehensive analysis of both quantitative and qualitative aspects of the data.

Figure 2

Phases and steps conducted for the research

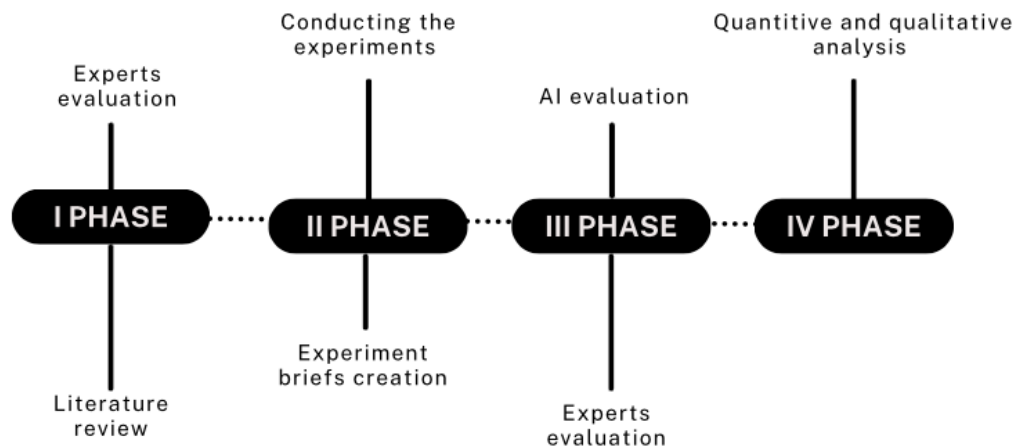


Figure 2 illustrates all the methodology phases and steps comprehensively. Initially, a set of evaluation criteria was established through an extensive literature review and expert consultation. Marketing professionals then participated in the experiments, creating newsletters under timed conditions with and without the use of AI tools. The content produced was anonymously evaluated against the predetermined criteria. Data was analyzed using both qualitative and quantitative analysis methods.

3. Results

The chapter on results is divided into two main sections. The first section explores the outcomes associated with the process of newsletter creation using AI tools. It's important to note that participants were not instructed to document the newsletter creation process without the aid of AI tools, as that falls outside the scope of this study. Therefore, the discussion will exclusively focus on the newsletter creation process facilitated by AI tools. This focus is intentional, as the study aims to ascertain if AI tools can enhance the newsletter creation outcome compared to traditional methods. The goal of data processing is to evaluate how AI contributes to content creation.

The analysis of the newsletter creation process with AI tools incorporates two approaches: an examination of the prompts given to ChatGPT during the newsletter development, and an analysis of participants' responses to a brief questionnaire filled out after creating their newsletters. This questionnaire sheds light on the participants who utilized AI tools, detailing their marketing experience, their familiarity with AI tools, how they learned to use these tools, and their satisfaction with the results they achieved. The study then compares these self-reported experiences and perceptions with expert evaluations of the work to identify any correlations that highlight the contexts in which AI tools prove beneficial.

The second section of the chapter presents the assessments received for the newsletters. These evaluations include the assessments of all experts: conducted by both “human experts” and those performed by the AI itself (using ChatGPT). This dual approach allows for a comprehensive understanding of the newsletters' perceived quality from both human and AI perspectives.

3.1. Users interactions and tasks assignments with ChatGPT

In examining user interactions with ChatGPT several key observations emerge. Users employ ChatGPT for a diverse range of tasks, which can be categorized into three distinct levels of complexity: simple, moderate, or complex (see Figure 3). Simple tasks underscore ChatGPT's role in fundamental content generation and linguistic translation, highlighting its utility in basic communication tasks (ref. Appendix C, Table 7). Throughout the experiment, questions related to simple tasks typically revolved around straightforward requests (e.g., "Please create a newsletter") or translation inquiries (e.g., "Translate this sentence into Estonian"). Users approaching with simple requests tend to focus on specific tasks without necessarily engaging ChatGPT in a broader dialogue.

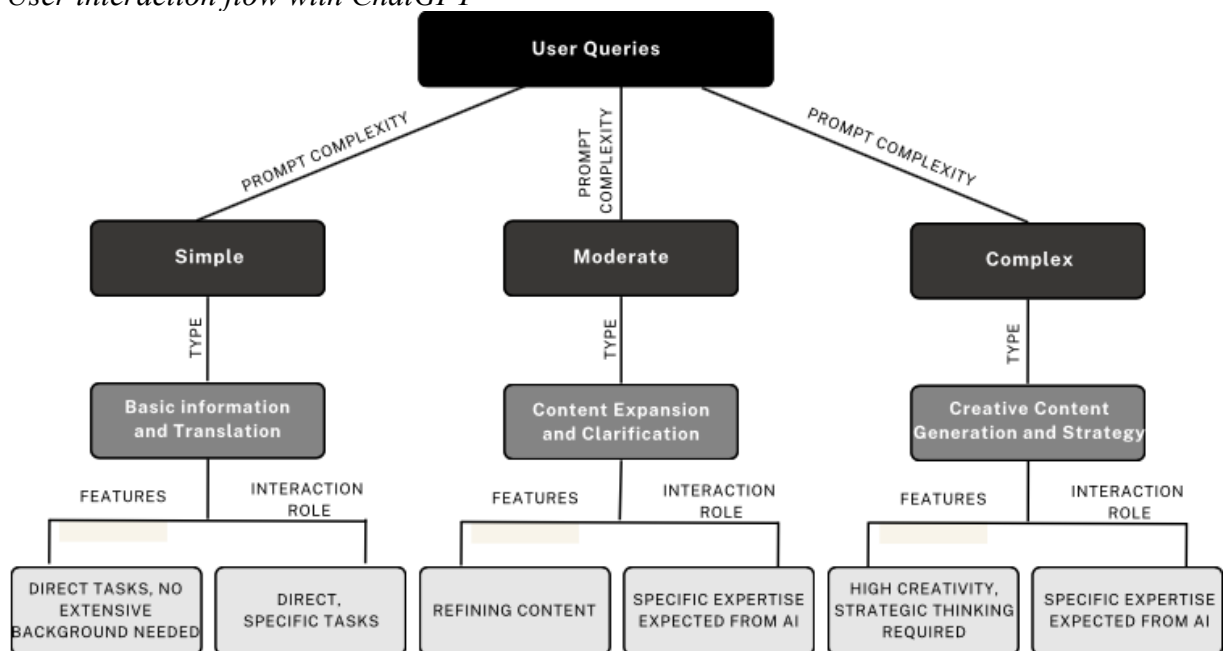
Moderate inquiries reflect a deeper engagement with content refinement, blending analytical and creative skills to enhance existing materials based on user objectives and feedback. Interactions for moderate tasks during the experiment encompassed requests for content expansion (e.g., "Specify more reasons to participate in this event") and content clarification (e.g., "What newsletter format would you recommend for engaging women aged 25–34"). These questions aimed at refining content to better suit a particular context or purpose. While not always explicitly framed as role-specific queries, moderate inquiries often imply an expectation for ChatGPT to adopt a specific perspective or expertise, such as that of a marketer. Users anticipate ChatGPT to comprehend and apply principles relevant to the task, including audience targeting and engagement strategies.

In contrast, complex inquiries challenge ChatGPT with advanced content creation and strategic planning, demanding tailored solutions aligned with specific goals and audience engagement strategies. Examples of such tasks during the experiment included requests such as "Develop a detailed event program including keynote presentations and workshops" or "Craft compelling CTAs for event participation." These tasks necessitated the generation of new content or ideas, demanding high levels of creativity and strategic thinking. Complex tasks, even when not explicitly framed as such, necessitate ChatGPT to adopt a comprehensive understanding and approach similar to that of a professional in the field. This involves creativity, and the ability to integrate various elements into a cohesive strategy.

Despite these distinctions, there are overarching similarities across categories, as users consistently aim to improve communication effectiveness through content creation or optimization. Users often initiate interactions with a brief outline of their requirements, followed by an iterative feedback process to refine the content collaboratively. Emphasis on engagement is evident across conversations, with users seeking to capture audience attention and encourage participation. However, differences in user processes are recognizable, particularly regarding detail orientation, creative input, audience tailoring, and the use of technical features. Some users provide detailed instructions upfront, while others prefer a more iterative approach.

Figure 3

User interaction flow with ChatGPT



The analysis reveals that ChatGPT showcases adaptability across tasks, fostering a feedback loop for collaborative refinement. Users assign roles to AI, expecting expertise, while emphasizing audience-centric content creation.

3.2. User's experience and self-perception analysis

Data in Table 3 reveals several conclusions regarding user experiences. In order to keep the results of this analysis objective, only the ratings of human experts have been taken into account to avoid potential biases introduced by AI, as human experts bring field-specific knowledge and contextual understanding to their evaluations. Both participants and human experts were evaluating newsletters using a 1-10 scoring scale, 1 representing the lowest score and 10 the highest. Participants were required to assess only their own work, assigning a score to their respective newsletters. In contrast, experts were tasked with evaluating all participants' newsletters on a scale of 1 to 10, providing an overall score for each newsletter.

Table 3

Overview of experimentees' backgrounds and outcomes using ChatGPT for task creation

Experience in marketing	AI tools learning methods	Experience with AI tools	User satisfaction with the result	Average expert rating*
User 8. 5 years experience	Independent study, YouTube tutorials.	Uses ChatGPT for ideas and Canva/Illustrator for visuals.	7.5 - final result needs still improvements.	7,25
User 4, 5 years experience	Basic knowledge from school, self-learning, and work training.	Weekly use for searching info and doing small tasks.	6 - Final result needs better suitability.	6,5
User 1, 3 years experience	Has experimented with AI tools for previous projects.	Uses AI for ideas; prefers creating assets without AI.	6 - Design is plain but content is clear.	6,25
User 5, 4 years experience	Previous courses and self-experimentation.	Used widely for various purposes.	7 – Important info is presented.	5,5
User 7, 1,5 years experience	Using YouTube to learn AI in design programs.	Limited previous use for studies and marketing work.	6 - Text satisfactory; design needs editing.	5,5
User 3, 2 years experience	Scarce knowledge, no direct learning or upgrades.	Intermittent use of Chat GPT.	4 – Didn't meet expectations.	4
User 9, 6 years experience	Limited Internet tutorials and self-testing.	Minimal use.	6 - Could have been more creative visually.	4
User 6, 10 years experience	University of Tartu for firsthand knowledge and testing.	Limited AI tool experience.	8 - Edited ChatGPT-provided text.	3,75
User 2, 2 years experience	Minor experience; has only used AI tools a few times.	Limited AI tool experience.	6 - There's room for improvement.	3,5

Note. Both experimentees and experts were evaluating newsletters using a 1-10 scoring scale, where 1 represented the lowest score and 10 the highest.

*The evaluations in this column only include scores provided by human experts, excluding assessment of ChatGPT.

The user's answers and their received score for their work by experts indicate that while AI tools hold considerable promise for enhancing content creation, there's substantial room for improvement in AI tool development and training methodologies for users.

An observation emerges when exploring the relationship between users' experience with ChatGPT, and the quality of work as rated by experts. Although the expert ratings vary, suggesting multiple factors influence the quality of work produced with AI tools, a pattern suggests that users who have more effectively engaged with and utilized AI tools, tend to achieve better expert ratings.

The data reflects no direct relationship between the users' experience in marketing and their satisfaction with AI tools, underscoring the accessibility of AI across different levels of expertise. The effectiveness of varied learning methods—ranging from independent study and YouTube tutorials to formal education—suggests multiple pathways through which users engage with AI tools.

One particular aspect is the clear preference among users for human-generated content, with AI serving as a supplementary tool. This indicates a valuable niche for AI tools that enhance rather than replace human creativity, suggesting that future developments should focus on fostering collaboration between AI and human intelligence. Furthermore, challenges in language support and localization, as indicated by users, suggest an area for significant improvement, particularly for global AI tool accessibility and effectiveness.

Using AI tools like ChatGPT can improve output quality and expert ratings, but it depends on how well users integrate these tools into their workflow. This analysis shows that the effectiveness of AI tools isn't solely about a user's background; it's also about how they engage with and learn to use these technologies.

3.3. Results of experts and AI evaluations

To comprehensively present the results of expert assessments, the outcomes have been grouped into three categories—low, medium, and high—based on the assessment scores provided by human experts. These categories were determined using coefficients of variation calculated during quantitative analysis. This structured grouping methodically illustrates the spectrum of AI capabilities and limitations, pinpointing where AI is effective and where human creativity is indispensable. Each group highlights different levels of expert consensus and degrees of subjectivity:

- Group 1: Low CV (Coefficient of Variation) (13%-20.4%). Focuses on fundamental content aspects with high consensus.

- Group 2: Medium CV (27.5%-33.1%). There is some subjectivity across content aspects but still notable consistency.
- Group 3: High CV (38.3%-55%). Includes the most subjective aspects, where expert opinions vary the most.

Group 1. KSFs receiving a low CV.

Table 4 consolidates the results of human experts assessment that exhibit the lowest coefficient of variation (13%-20.4%). The AI assessment maintains a similar consistency, with a CV ranging from 6.8% to 17.2%

Table 4

Results combining experts assessments with the lowest coefficient of variations (13%-20,4%) between the reflected categories

Criteria	Results explanation for experts' assessment AI – content creation with AI-assisting. H – “Human”, content creation without the AI tools.	Human experts assessment			AI assessment	
			Content created with AI help	Content created without AI help	Content created with AI help	Content created without AI help
Clarity and Readability	AI: Challenges in achieving clarity and readability due to limitations in understanding nuanced language styles. H: Content is more understandable, adapting naturally to audience needs.	M	3	3,7	4,6	4,4
		DVR	Average	Above Average	Above Average	Above Average
		CV	23,2%	20,2%	11,6%	11,1%
Main message/ purpose	AI: May struggle with message and tone creation due to data reliance. H: More effectively creates main message with emotional intelligence, though success varies across creators.	M	3,4	3,6	4,9	4,8
		DVR	Average	Average	Above Average	Above Average
		CV	16,9%	13,1%	6,8%	9,2%
Grammar and Language	AI: Can ensure grammar, yet may struggle with nuanced creative language. H: Better grasp of language nuances, yet face a higher risk of grammatical errors.	M	3,1	3,4	3,9	3,6
		DVR	Average	Average	Above Average	Above Average
		CV	12,8%	14,6%	17,2%	14,8%
Content Relevance	AI: Can tailor content to audience preferences, possibly enhancing relevance, but struggles with nuances. H: Adapts content to audience needs, success varies based on know-how.	M	3,4	3,6	4,9	4,8
		DVR	Average	Above Average	Above Average	Above Average
		CV	14,3%	20,4%	6,8%	9,2%
Credibility	AI: Limited in capturing human nuances, reducing authenticity. H: There's stronger belief in the content's human origin, underscoring the importance of personal touch in authentic communication.	M	2,4	3,4	4,6	4,7
		DVR	Below Average	Average	Above Average	Above Average
		CV	35%	17,2%	13%	10,7%

Note. The experts were evaluating the content based on a following scale: Poor (1), Below Average (2), Average (3), Above Average (4), Excellent (5)

*M: Experts evaluation mean

**DVR: Dominating verbal rating

***CV: Coefficient of variation

This lower coefficient of variation indicates a consensus among experts regarding the quality of the evaluated content, irrespective of AI involvement, particularly emphasizing the human element. The KSFs included in this group are clarity and readability, main message and purpose, grammar and language, content relevance, and credibility.

Particularly, the categories of clarity and readability, main message and purpose, and content relevance demonstrate an advantage in content created without AI assistance, highlighting the nuanced understanding and adaptability of human writers to specific audience needs and contexts. Although AI ensures grammatical correctness, it often falls short in handling nuanced language and creative expression, which are crucial for engaging and effective communication.

A notable gap in credibility scores exists, with human-created content perceived as more credible and authentic. This is especially evident in the coefficient of variation, where AI-assisted content shows considerable inconsistency, highlighting AI's struggles to mimic human-like nuances that enhance content authenticity.

The author of this work suggests that these five categories share common characteristics that likely influenced the consistent ratings by human experts. Experts' shared understanding of how to evaluate these categories is based on common perceptions of how these aspects should be reflected in newsletters. Factors such as clarity, relevance, and grammar are uniformly perceived by experts due to established standards related to language rules and the effectiveness of message communication. These aspects are fundamental goals of any content, particularly in marketing where conveying a clear and persuasive message is crucial. Thus, these factors are often central during content creation and review, likely leading to more consistent assessments by experts. The basic criteria for what makes content clear or credible are more universally agreed upon, hence the lower variability.

Grammar and language correctness are more objective and less open to interpretation compared to more subjective criteria like creativity. This objectivity tends to result in lower coefficients of variation because experts are more likely to agree on whether a sentence is grammatically correct than on the creativity of a piece of content. AI applications in content creation generally achieve basic grammatical correctness and maintain a standard level of clarity and language use. Since these aspects can be systematically programmed and verified, they lend themselves to consistency when AI tools are employed, reducing variability in expert evaluations compared to more subjective aspects like creativity or tone.

The lower coefficients of variation in these categories suggest that both human and AI-driven content manage to meet fundamental content creation standards consistently, as these elements are essential for any effective communication in marketing. This consistency is crucial for maintaining the integrity and professionalism of the content, which are non-negotiable from a marketing perspective, irrespective of whether the content is generated by humans or AI.

In the evaluations conducted by AI (ChatGPT), it is evident that AI consistently assigned higher ratings to newsletters across all criteria compared to human experts. Notably, AI's lowest rating was "Above Average," and its ratings exhibited less variability than those provided by human experts: AI's ratings ranged from 8.1% to 14.8%, whereas human experts' ratings varied from 27.5% to 33.1%. Interestingly, ChatGPT tended to assign higher scores to content crafted in collaboration with AI tools across most categories. This observation suggests a preference by ChatGPT for AI-assisted content. Overall, ChatGPT tended to give newsletters higher scores than human experts did, suggesting that human experts might be more critical in their assessments. However, it's important to consider that ChatGPT may have limitations, such as its inability to analyze information in the same nuanced way as humans, which could impact its assessment.

Overall, the data suggests that while AI tools can support content creation processes, they are currently less effective than humans at producing consistently high-quality content. Human creators outperform in adaptability, understanding of audience nuances, and maintaining a personal touch, essential for impactful communication.

Group 2. KSFs receiving a medium CV.

Table 5 presents results combining human expert evaluations with a medium coefficient of variation (27.5%-33.1%), highlighting a range of opinions that suggest greater subjectivity in the assessment of these categories. The AI assessment remains consistent within this group, with a CV ranging from 8,1% to 14,8%.

Table 5

Results combining experts assessment with the medium coefficient of variations (27,5%-33,1%) between the reflected categories

Criteria	Results explanation for experts' assessment AI – content creation with AI tools H – “Human”, content creation without the AI tools.	Human experts assessment		AI assesment		
			Content created with AI help	Content created without AI help	Content created with AI help	Content created without AI help
Layout	AI: Can organize content for optimized reader engagement using data-driven insights, but struggles with flexibility and adaptation to specific nuances. H: Allows for nuanced adjustments and creative layouts, catering to the unique demands of content.	M	2,9	3,4	3,9	3,8
		DV R	Average	Average	Above Average	Above Average
		CV	28,7%	31,7%	8,6%	11,7%
Content Engagement Level	AI: Identifies engaging patterns that engage readers but might not evoke strong emotions or deeply engage audiences with innovation. H: Humans craft narratives that resonate emotionally, though effectiveness varies with the creator's skill and audience understanding.	M	2,6	3	3,7	3,6
		DV R	Below Average	Average	Above Average	Above Average
		CV	28%	33,1%	11,8%	14,8%
Communication Tone of Voice	AI: AI can mimic specific tones of voice but struggles to adapt the tone for different contexts. H Humans excel at modifying tone to meet audience expectations, providing more flexibility and subtlety, though execution varies.	M	2,7	3	4,1	4,1
		DV R	Below Average	Average	Above Average	Above Average
		CV	24,5%	27,5%	9,6%	8,1%
Communication Tone Likelihood	AI: Shows moderate variability in tone likeness and voice, indicating inconsistency in capturing the intended tone and difficulty in mirroring human emotion and expression. H: Exhibits slightly higher variability in tone likeness, reflecting individual creators' diverse styles but suggests manual content aligns more closely with the expected tone.	M	2,5	3	4,2	4
		DV R	Below Average	Average	Above Average	Above Average
		CV	25,5%	28,1%	10,4%	12,5%

Note. The experts were evaluating the content based on a following scale: Poor (1), Below Average (2), Average (3), Above Average (4), Excellent (5)

*M: Experts evaluation mean

**DVR: Dominating verbal rating

***CV: Coefficient of variation

The KSFs in this group include layout, content engagement level, communication tone of voice, and communication tone likeness. Although this range of variation is broader, it is evident that content created solely with human intelligence generally performs better across all KSFs in this group.

Notably, the layout category illustrates the dual impacts of AI and human creativity. AI assistance is acknowledged for potentially enhancing content to boost engagement. AI's ability to apply systematic uniform standards often utilizes templates and formats, contributing to consistent structural aspects of content creation. This uniformity tends to result in more consistent evaluations, as AI-assisted content adheres to established design principles. In contrast, human-created content exhibits greater variability, reflecting the flexibility of human designers. These creators often experiment with layouts based on aesthetic preferences and the specific goals of the content, pushing conventional boundaries with intuitive design thinking tailored to the unique context and audience. This flexibility leads to higher variability, as personal creativity may influence design choices, potentially enhancing relevance for specific audience needs. However, since layout involves both creative and functional elements, there may still be common standards and practices that reduce overall variability in expert evaluations.

Regarding the content engagement level, it can be interpreted that content produced together with AI tools, is more predictable due to its ability to identify and reproduce audience-engaging patterns. However, this predictability can sometimes lead to a lack of genuine novelty or failure to adapt to emerging trends not captured in the data. In contrast, human-produced content can adapt intuitively to audience preferences, potentially engaging on a deeper emotional level. This adaptability results in greater variability, as human judgment considers a broader range of factors beyond historical data.

While AI is capable of mimicking several aspects of content creation that are traditionally done by humans, it typically struggles to fully capture the more nuanced elements, such as creativity, authenticity, and the depth of emotional engagement. These subtle but critical aspects are often picked up by experts who are trained to notice fine details and variations in content quality. This expertise leads to moderate variability in how they rate the content generated together with AI. However, these nuanced differences might not be as apparent to the general audience, who may not focus on or even recognize these finer details in the content.

Similarly to the previous group, AI assessments indicate that ChatGPT consistently assigned higher ratings to content across all categories compared to human experts. It is also apparent that AI assigned higher scores to content created with AI tools. This observation highlights once more ChatGPT's preference for AI-assisted content.

The results reveal AI's ability to enhance certain aspects of content creation but also highlight challenges with subjective elements like layout design and tone consistency. While AI maintains consistency, it struggles with innovation and contextual flexibility.

Group 3. KSFs receiving a high CV.

Table 6 presents results combining human experts' evaluations of KSFs with a high coefficient of variation (38.3%-55%), which indicates significant variability in expert evaluations. AI assessment within this group is considerably lower compared to that of human experts, with a coefficient of variation ranging from 11.8% to 20.8%.

Table 6

Results combining experts assessments with the high coefficient of variations (38,3%-55%) between the reflected categories

Criteria	Results explanation for experts' assessment AI – content creation with AI tools H – “Human”, content creation without the AI tools.	Human experts assessment			AI assessment	
			Content created with AI help	Content created without AI help	Content created with AI help	Content created without AI help
Design and Visual Appeal	AI: Can optimize design, yet may lack creativity, resulting in a sense of sameness. H: Quality varies, but overall more personal style can be seen.	M	2,7	3	3,7	3,7
		DV R	Average	Average	Above Average	Above Average
		CV	21,3%	39,3%	15,2%	13,6%
Creativity and Originality	AI: Limited creativity, likely due to reliance on existing data constraining new ideas. H: More creative content, but perceptions vary among evaluators.	M	2,4	2,8	3,7	3,6
		DV R	Below Average	Average	Above Average	Above Average
		CV	34%	45,8%	11,8%	14,8%
Actionability	AI: Struggles to generate actionable content and calls to action. H: Challenges in maintaining consistent actionability.	M	2,6	2,7	4,4	4,4
		DV R	Below Average	Average	Above Average	Above Average
		CV	30,8%	38,3%	19,8%	16,3%
Personalization and Segmentation	AI: Struggles with consistently personalizing content. H: Struggles in content perhaps due to the interpretation of data.	M	2,1	2,1	2,7	2,6
		DV R	Below Average	Below Average	Above Average	Above Average
		CV	37,9%	55%	20,8%	20,6%

Note. The experts were evaluating the content based on a following scale: Poor (1), Below Average (2), Average (3), Above Average (4), Excellent (5)

*M: Experts evaluation mean

**DVR: Dominating verbal rating

***CV: Coefficient of variation

The KSFs in this category are design and visual appeal, creativity and originality, actionability, and personalization and segmentation. Despite the high variability observed between these KSFs, it is evident that content created solely with human intelligence consistently outperforms AI across all key success factors.

The variability in design and visual appeal, as well as personalization and segmentation, suggests that these areas of content creation are highly subjective, and heavily influenced by individual tastes and preferences. For example, the considerable variability in how experts rated the design and visual appeal of human-created newsletters may reflect differing aesthetic standards and the subjective nature of visual judgment. Humans' unique choices they make in layout, color schemes, and visual elements can greatly influence perceptions of appeal. In contrast, content produced in collaboration with AI tends to produce more consistent designs that adhere to established best practices. However, these might lack the creativity and personalized touch that come from human designers, which could lead to perceptions of sameness despite technical competency.

The high CV in creativity and originality highlights the subjective nature of creativity, where evaluations often vary widely based on individual perceptions of what constitutes originality and creative content. Human creators, depending on their distinct styles and approaches, can produce highly divergent works that may be seen as more or less creative by different experts. AI, on the other hand, shows limited capability for consistent innovation and tends to produce more predictably structured content. This is likely due to its reliance on existing data and patterns, which may prevent novel ideas or creative approaches not already present in the training data.

The actionability category shows that both AI-assisted and human-created content face challenges in crafting messages that effectively prompt user engagement or action, highlighting a universal challenge in content creation that transcends the method of creation.

Similar to previous groups, the assessment conducted with AI indicates a tendency for more generous and higher scores compared with those given by human experts. In this group, AI assessment of content created in collaboration with AI and without AI are more evenly distributed. However, content created in collaboration with AI still receives slightly higher rankings, by 1 percentage point, compared to content created manually. While the differences are not significant in this instance, they nonetheless suggest a preference for AI-assisted content creation.

The pronounced variability, particularly in human expert assessment within this group underscores the complex, subjective nature of assessing creativity, design appeal, and personalization in content. These findings suggest that while AI can contribute to certain aspects of content creation, the unique creative capabilities of human creators play a critical role in areas that demand innovation, customization, and emotional engagement.

Comprehensive insights from experts' evaluations

Tables 4-6 reveal that newsletters created without AI assistance consistently received higher ratings from human experts across all evaluated criteria, indicating that, within the context of this study, manually produced content is perceived as superior in quality and value. Newsletters created without AI tools generally have a higher mean score in categories like credibility and communication tone of voice, suggesting a more human-like quality and consistency. However, they also exhibit higher CVs, indicating differing degrees of success in customizing content manually.

The data suggests that while AI can assist in content creation, there's a perceptible gap in achieving the nuanced, human-like qualities that manual content creation captures more effectively. Although, AI tools seem to offer a more consistent approach in some areas, though with room for improvement in mimicking human authenticity and tailoring content more

The author notes that the depth and overlap in the percentage differences of the coefficient of variation may stem from various factors. Firstly, the overlap in the coefficient of variation may arise because experts often share similar expectations and professional backgrounds, which contributes to a convergence in their expectations and standards regarding what constitutes relevance and credibility in a professional or marketing context. This commonality naturally leads to more consistent evaluations, indicating a higher consensus and a lower coefficient of variation. Conversely, differences in expert judgments may stem from varying interpretations of certain categories, such as creativity and personalization, where expectations differ.

Additionally, the author speculates on the influence of AI on content quality. It is observed that content created with AI tools typically shows a lower coefficient of variation, suggesting that AI tends to produce more uniform content that is neither exceptionally poor nor outstanding. In contrast, content created solely by humans displays a higher coefficient of variation, indicating a greater diversity in quality. This diversity can lead to more unique and

surprising outcomes, as human creativity is less constrained than AI, potentially producing more varied and innovative content.

The content assessment, conducted using ChatGPT, aimed to evaluate how AI would judge the KSFs without knowing which newsletters were AI-assisted and which were solely human-generated. Given its role as one of the experts in this study, ChatGPT received identical instructions and comprehensive introductions to each KSF, mirroring those provided to human experts. The experiment revealed notable insights into AI's role in content assessment: AI evaluations proved to be more consistent, with CV ranging from 6.8% to 27.2%, significantly lower than those of human experts, which ranged from 13% to 55%. This consistency suggests that AI is less influenced by personal biases and subjective interpretations that often affect human assessments.

Moreover, the results indicated a clear trend where ChatGPT consistently rated AI-generated content more favorably. This tendency may suggest that AI evaluators like ChatGPT inherently recognize and prefer the patterns and structures typical of AI-generated content, likely because these elements closely align with their training models. This preference raises important questions about potential biases in AI evaluations, suggesting that AI might naturally favor content that mirrors its programming.

These insights underscore the nuanced impact of AI on content creation. While AI tools offer consistency and efficiency in some areas, they struggle to replicate the depth of nuanced understanding required for truly authentic content. Conversely, human power, while more variable, can be managed in areas requiring deep understanding, and personal touch.

3.4. Expert evaluations of cognitive load and innovativeness

As explained above, in this research, eighteen newsletters were subjected to a thorough assessment by experts. These professionals were tasked not only with rating each newsletter based on thirteen KSFs but also with categorizing them in terms of cognitive demand and innovation. For the categorization, a two-dimensional axis plot was utilized: the x-axis stretched from "Standard and Forgettable" to "Innovative and Memorable," while the y-axis ranged from "Low Cognitive Load" to "High Cognitive Load." Each human expert marked their assessment by placing a single dot on the corresponding location on the map that they believed best represented each newsletter's attributes. Although AI is considered one of the experts in this study, this task was not performed using AI due to technical limitations.

The overarching goal of this task was to determine if noticeable distinctions existed between content facilitated by AI tools and that which was purely a product of human

intellect, as well as to identify any tendencies of these groups to favor particular classifications. The results of the expert evaluations are presented in Appendix E with Figures 5 and 5.1 highlighting the prevailing trends within the AI-assisted and human-generated content categories.

Analysis of AI-assisted content shows a spread across all quadrants, with many falling into the "High Cognitive Load" region. This indicates that AI-generated content isn't always easy to process, despite expectations. Some AI content is innovative but demands significant mental effort. Newsletters created without AI tend to have entries in areas with lower cognitive load, suggesting they are generally more reader-friendly. Notably, there's still representation in the "Innovative and Memorable" quadrant, though less than AI-assisted content in the "High Cognitive Load" sector.

Insights from expert evaluations shed light on AI's role in content creation. While AI is praised for simplifying tasks, findings suggest it may introduce complexities, increasing cognitive load. AI algorithms may generate rich but challenging content, raising questions about their understanding of reader needs compared to human creators.

Comparative analysis of AI-assisted and human-created newsletters highlights that while AI fosters content innovation, it doesn't guarantee accessibility. Variability in cognitive load across AI content underscores the need for AI tool refinement to match human comprehension ease. Moreover, the presence of easily understandable yet innovative human-created content underscores the ongoing importance of human expertise in crafting engaging newsletters.

4. Discussion

Using a content marketing success factors framework, this study aimed to assess whether the collaboration of human intelligence with AI possesses the capacity to generate marketing content that rivals or surpasses those crafted solely by human intelligence, with a specific focus on marketing newsletters. This inquiry also extends our knowledge on how AI can augment the success of marketing content by considering success factors proposed by both academia and industry experts and implemented with experts know-how.

To fulfill this aim, this study tackled two key research questions: what are the primary success factors of content marketing assets, and in what ways, if at all, does AI contribute to the creation and success of marketing content. It can be said that the researcher found answers to both of the set research questions and fulfilled the aim of the study.

1. Human-created content outperforms AI-assisted content

Preliminary findings from this study indicate that AI cannot currently craft content that rivals those crafted by human intelligence. Newsletters crafted without AI assistance were rated more highly, aligning with studies by Darda et al. (2023) and Wahid et al. (2023), which noted a preference for human-generated content. Newsletters created without AI assistance consistently received higher ratings from experts across all evaluated criteria, indicating that, within the context of this study, manually produced content is perceived as superior in quality and value.

Nonetheless, these results come with limitations. From a methodological point of view, it can be said that the number of observations was limited, and broad-based results cannot be concluded based on this. Additional observations would be necessary to obtain broad-based results.

2. AI contributes to the creation of marketing materials, especially for people with previous experience with AI tools.

Although human-generated content proved more successful in this study, AI still demonstrates significant potential to enhance the creation of marketing content. Analysis reveals that while human-generated content received higher ratings across all evaluated criteria, AI-assisted content remained competitive, with no significant disparities in mean scores. These results underscore AI's potential efficacy in aiding content creation processes, suggesting a viable avenue for collaboration between human intelligence and AI tools in marketing content generation.

Analysis of ChatGPT prompts (Table 7) reveals that AI tools can be utilized for a range of tasks from simple translations to more complex activities such as enhancing content fit or developing creative strategies. The use of ChatGPT in these experiments aligns with previous research indicating that AI can create compelling content that resonates with audiences (Haleem et al., 2022) and enhance creativity (Anantrasirichai and Bull, 2021). While the creativity of AI-generated content was rated lower compared to that produced solely by humans, it is noteworthy that AI was frequently tasked with creative challenges, particularly useful when time constraints are tight. In scenarios where users have limited time to develop content, the ability of AI to quickly generate innovative ideas is both relevant and beneficial.

The research also explored the differential impact of AI on individuals with varying levels of marketing experience. It was found that those with prior experience with AI tools

benefited more significantly, challenging the notion that greater marketing experience alone correlates with higher content quality.

This suggests that familiarity with AI can enhance its effectiveness, a finding supported by Brynjolfsson (2023), who noted that AI tools are particularly beneficial for less experienced individuals. In the context of this study, it can be said that the broader experience with AI tools, balances the expertise with marketing, which also aligns with Brynjolfsson's (2023) findings that AI assistance does not significantly benefit the workers with the most experience, but rather distributes the expertise.

3. There are skills and qualities that AI cannot overcome compared to human intelligence.

Despite that AI tools can offer consistency and efficiency in some areas, they still struggle to replicate the depth of human creativity, emotional intelligence, and nuanced understanding necessary for truly personalized, engaging, and authentic content. On the other hand, human capability, though more variable, thrives in domains requiring deep understanding, creativity, and a personal touch. This observation contrasts with Agion et al.'s (2017) suggestion that AI could revolutionize the creative process through its ability to solve complex problems and enhance creative efforts. The current study emphasizes that while AI can aid in certain aspects of content creation, there are aspects where AI should not be relied upon. For example, unique creative abilities and personal engagement of human creators remain crucial in areas demanding high levels of innovation, customization, and emotional involvement. Thus, it appears premature to declare that AI will revolutionize creative processes.

From a theoretical perspective, these findings challenge existing models of AI capabilities in content creation, suggesting that such theories might overestimate AI's proficiency in areas traditionally dominated by human expertise. Practically, this advocates for an integrated approach where AI tools are utilized to augment human creativity rather than replace it. There is a substantial opportunity to redefine AI's role in content creation, focusing on collaboration over substitution. For example, AI can handle data-driven insights and routine content management, freeing human creators to concentrate on tasks requiring creative and emotional depth.

To assess AI's role on the quality of marketing content assets, the framework of content marketing key success factors (KSF) was compiled as a working tool during this study. The literature review showed that marketing professionals' practices largely align with

academic findings on effective marketing. From this basis, the author defined nine initial KSFs: content relevance, creativity and originality, layout and design, clarity and actionability, grammar and language, and personalization. To ensure the validity and comprehensiveness of our criteria, the author consulted with three marketing experts who confirmed and suggested enhancements to our initial list by complementing the list with content relevance, creativity, layout, design, clarity, actionability, and personalization. This led to a refined framework of 13 distinct KSFs, which also aligns with foundational marketing principles like the AIDA model.

5. Summary

This study explored the role of AI in marketing content creation, based on defining the framework of 13 key success factors (KSFs). Through a controlled experiment comparing 18 newsletters—nine AI-assisted and nine human-crafted—evaluated against these KSFs, the research demonstrated that human-generated content consistently outperformed AI-assisted outputs. This challenges the notion of AI's supremacy in creative sectors like marketing, underscoring the superior outcomes of human creativity.

By empirically testing AI's role against established KSFs in a controlled environment, this study makes a significant contribution to the literature, providing an understanding of AI's capabilities and limitations in marketing content creation. The refined evaluation framework developed and validated through this research not only fills a gap in existing empirical studies but also offers a practical tool for industry professionals assessing the quality of marketing content.

This study suggests a balanced approach to integrating human creativity with AI in marketing. Theoretical implications prompt a reconsideration of existing models, proposing AI's role in supporting human marketers with analytical tasks, freeing them for creative and strategic exercises. Practical findings emphasize the importance of effectively utilizing AI tools, acknowledging the interplay between user engagement and content quality. While AI ensures consistency in tasks like grammar, humans are able to craft emotionally resonant content. Thus, collaboration is vital, with AI augmenting human creativity. These insights guide marketers in integrating AI, highlighting the importance of ongoing research and development. Moreover, business leaders are urged to prioritize AI training for marketers to optimize the synergy between human creativity and AI efficiency, ultimately enhancing marketing outcomes.

The study, however, has limitations. While it suggests avenues for further exploration within the topic, replicating the study with a larger sample size could enhance understanding and broaden applicability. Moreover, a larger sample facilitates the examination of additional influencing factors, thereby deepening insights. Therefore, further research is imperative for a comprehensive understanding of the topic.

Moreover, the controlled and structured experimental design may not fully capture the nuanced dynamics of real-world marketing campaigns. Future research could extend the application of the developed KSF framework to diverse marketing formats and longer-term campaigns to validate and refine the findings. Additionally, investigating the influence of AI in various cultural and market contexts would enrich comprehension of its global efficacy.

Another limitation is the absence of testing newsletters on actual consumer segments and subjecting them to real-life evaluation. This presents an opportunity for future research to provide valuable insights into newsletter success based on actual e-mail marketing metrics. Exploring whether expert assessments align with newsletter recipients' expectations and evaluations would be particularly intriguing.

Overall, this study outlines a critical perspective on the role of AI in marketing, advocating for a balanced approach that leverages AI's capabilities while recognizing value of human creativity. This approach not only ensures the production of high-quality, engaging content but also supports ongoing innovation and strategic improvement in marketing practices.

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ASSESSING AI'S POTENTIAL IN MARKETING CONTENT CREATION

supervised by

Maaja Vadi and Priit Vahter,

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Appendix B. Links to files related to results

A separate folder has been created to house additional detailed files related to the results due to the volume of data. The folder includes the following links: 1) Qualtrics extracts from experts' evaluations; 2) calculations from quantitative data analysis; 3) newsletters created during the experiments. The folder is visible via following link: [MA thesis_results](#)

Appendix C. Analysis of ChatGPT prompts

Table 7

Overview of assigned tasks provided to ChatGPT during experimental sessions

Category	Question Type	Examples from Conversations	Similarities	Differences	User Process Insights	Interaction Role with AI
Simple	Basic Information and Translation Requests	- "Please create a newsletter." -"Translate this sentence into Estonian." -"Write a short bio for a speaker."	Requests for straightforward tasks like translations or short texts. No need for extensive background information or creative input.	Specificity of information requested varied. Some asked for direct translations, while others sought simplification alongside translation.	Starting with a Brief: All users began by providing basic event details or a specific content request, indicating a straightforward approach to task initiation.	Users approaching with simple requests tend to focus on direct, specific tasks without necessarily engaging ChatGPT in a broader role. This straightforward approach suggests that users are seeking immediate, concrete outputs rather than engaging in a more complex dialogue or process.
Moderate	Content Expansion and Clarification	- "Specify more reasons to participate in this event." -"Make the newsletter content shorter and emphasize the event name." -"What newsletter format would you recommend for engaging women aged 25–34?"	Questions aimed at enhancing or specifying content based on initial input. Sought to refine content to better fit a context or purpose.	Varied in terms of content focus: some were about event details, others about marketing strategies or speaker information. Level of detail requested differed.	Iterative Feedback & Creative Input: Demonstrates users refining content based on feedback and seeking creative input for audience engagement. Variability in detail orientation and creative control is evident in tailoring content.	While not always explicitly stated as role-type questions, moderate inquiries often imply a need for ChatGPT to adopt a specific perspective or expertise, such as that of a marketer. Users expect ChatGPT to understand and apply principles relevant to the task, such as audience targeting and engagement.
Complex	Creative Content Generation	- "Develop a detailed event program including	Required generating new content	The complexity of creative	Audience Tailoring & Use of	Complex tasks, even without explicitly stating

	and Strategy	keynote presentations and workshops." - "Craft compelling CTAs for event participation." - "Create a promotional newsletter with detailed information and creative content beyond the brief."	or ideas. High creativity, strategic thinking, and comprehensive content creation needed.	input varied significantly	Technical Features: Users actively tailored content to specific demographics, indicating a nuanced approach to engaging target audiences. They sought to enhance appeal through technical features, emphasizing creativity and strategic alignment with audience preferences, showcasing a sophisticated audience-centric content creation process.	a role for ChatGPT, necessitate that ChatGPT adopts a comprehensive understanding and approach taking a role of a professional in the field. This involves strategic thinking, creativity, and an ability to integrate various elements into a cohesive strategy.
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Appendix D. Scatter plots of human experts assessment

Scatter plot figures below are reflecting experts evaluation to content innovativeness and cognitive load.

Figure 5
Scatter plot of content done without AI contribution

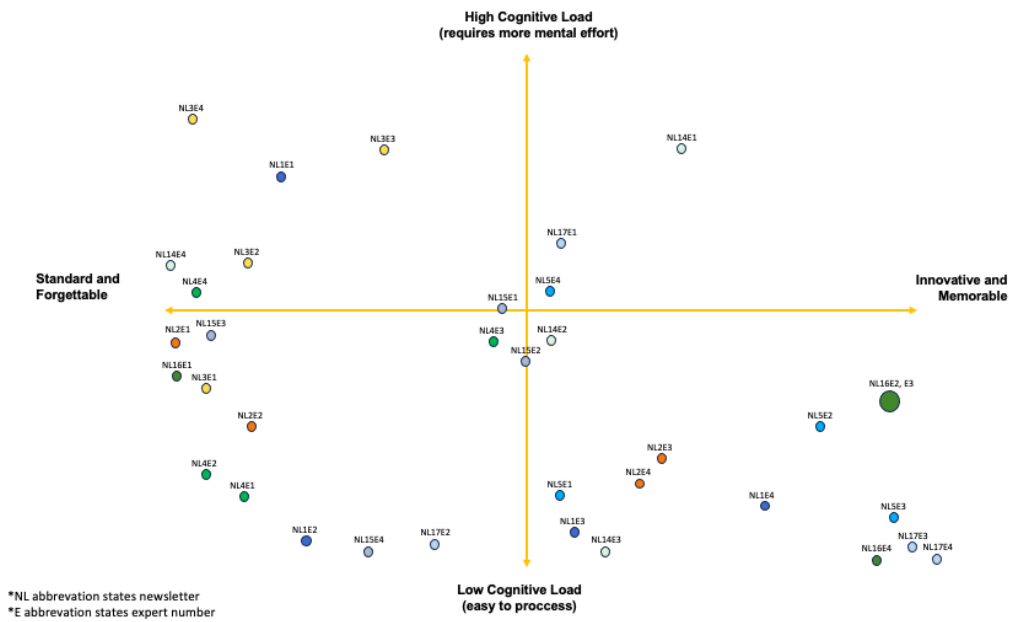
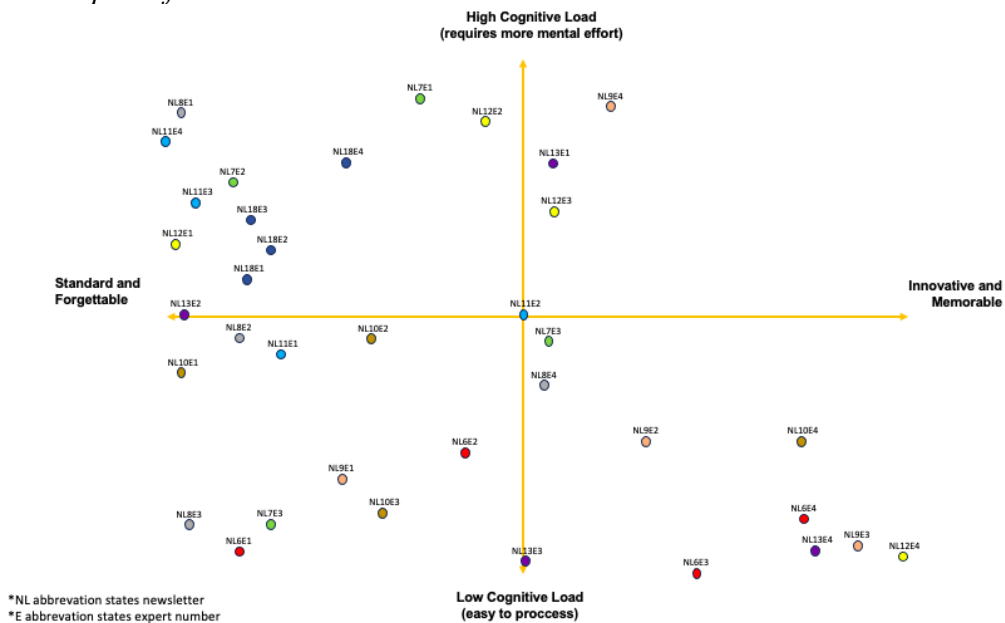


Figure 5.1
Scatter plot of content done with AI contribution



Appendix E. Briefs for experiments

Brief A for the participants of the experiment crafting newsletter with the help of AI tools (cross-translated from Estonian text)

Research Participation - Consent and Confidentiality:

You are part of an exciting study that examines the impact of different methods of creating newsletters in the marketing industry. Your privacy is extremely important to us. All information you submit, including your submitted work and personal information, will be treated as strictly confidential. The data collected during this experiment will be used exclusively for research purposes and your identity will remain anonymous. Your participation is completely voluntary and you have the right to withdraw at any time. By participating, you give your informed consent to the use of your data in accordance with these principles.

Task and Background:

Your task is to create a newsletter promoting an upcoming fictitious marketing conference using AI tools. Although you can use any AI tool as you wish, it is recommended to use ChatGPT, which allows you to extract the instructions given to the AI. The goal is to make the content of the newsletter engaging, informative and tailored to attract marketing managers, professionals and interested parties. Use the Estonian language to write newsletters.

Input for creating a newsletter:

- Event Information:
- Name: MarketingExpo 2024
- Date: 03.04.2024
- Venue: Kultuurikatel, Tallinn
- Keynote Speakers: Gary Vaynerchuk; Seth Godin

Conference Highlights:

- Briefly highlight key presentations, workshops or other side events that will take place during the conference (presentations and similar events may be fictitious).
- Emphasize exclusive opportunities for inspiration and motivation and networking.

Format:

Please use the Smaily or Mailchimp platforms to create a newsletter. It is recommended to add thematic visuals, images, icons, etc. of your choice to the newsletter, which you consider relevant. Please send the result of your work as a screenshot and a link.

Guidelines for creating a newsletter with the help of AI tools:

As mentioned before, you have access to AI tools to help you in various aspects of your newsletter creation. For example, there is an option to use ChatGPT. Use these tools to improve the content and overall quality of your newsletter.

Time limit:

You have 1 hour to complete the task of writing a newsletter. Please take into account the given time limit in order to submit the newsletter completed within the given time.

Submitting a newsletter:

Submit the prepared newsletter by e-mail [helenavaht@gmail.com] within the 1-hour deadline and send the e-mail with the subject line "MarketingExpo 2024". When sending the newsletter, please also include the prompts/instructions you gave ChatGPT when you created the newsletter - you can do this with the URL link found at the very top of the chat with ChatGPT (the orange button in the screenshot below):



ChatGPT 3.5 ▾



Along with the email newsletter and ChatGPT prompts/input, we also ask you to fill out a quick questionnaire about the assignment process by answering the following questions:

1. How long have you worked in marketing/communications? How much experience do you have writing newsletters?
2. How good did you feel creating the newsletter?
3. How satisfied were you with the result on a scale of 1-10? Why?
4. What is your experience with AI tools? How much have you used them?
5. How have you learned to use AI tools? How did you acquire your initial knowledge and in what way have you improved it?

Acknowledgment

Thank you for participating in the study. Your expertise and efforts are critical to research focused on whether and how AI will impact marketing content and materials. Your commitment to furthering the field is greatly appreciated and we sincerely thank you for your active participation. If you have additional questions, feel free to contact the experiment coordinator Helena Vaht [phone number].

Brief B for the participants of the experiment crafting newsletter without the help of AI tools (cross-translated from Estonian text)

Research Participation - Consent and Confidentiality:

You are part of an exciting study that examines the impact of different methods of creating newsletters in the marketing industry.

Your privacy is extremely important to us. All information you submit, including your submitted work and personal information, will be treated as strictly confidential. The data collected during this experiment will be used exclusively for research purposes and your identity will remain anonymous. Your participation is completely voluntary and you have the right to withdraw at any time. By participating, you give your informed consent to the use of your data in accordance with these principles.

Task and Background:

You are tasked with creating a newsletter promoting an upcoming fictitious marketing conference using traditional marketing methods. There is limited access to AI tools when creating the newsletter - please do not use AI tools or AI-related applications when creating the newsletter. The goal is to make the content of the newsletter engaging, informative and tailored to attract marketing managers, professionals and interested parties. Use the Estonian language to write newsletters.

Input for creating a newsletter:

- Event Information:
- Name: MarketingExpo 2024
- Date: 03.04.2024
- Venue: Kultuurikatel, Tallinn
- Keynote Speakers: Gary Vaynerchuk; Seth Godin

Conference Highlights:

- Briefly highlight key presentations, workshops or other side events that will take place during the conference (presentations and similar events may be fictitious).
- Emphasize exclusive opportunities for inspiration and motivation and networking.

Format:

Please use the Smaily or Mailchimp platforms to create a newsletter. It is recommended to add thematic visuals, images, icons, etc. of your choice to the newsletter, which you consider relevant.

Time limit:

You have 1 hour to complete the task of writing a newsletter. Please take into account the given time limit in order to submit the newsletter completed within the given time.

Submitting a newsletter:

Submit the prepared newsletter by e-mail [helenavaht@gmail.com] within the 1-hour deadline and send the e-mail with the subject line "MarketingExpo 2024". When sending the newsletter via email, we also ask you to fill out a quick questionnaire about the assignment process by answering the following questions:

1. How long have you worked in marketing/communications? How much experience do you have writing newsletters?
2. How good did you feel creating the newsletter?
3. How satisfied were you with the result on a scale of 1-10? Why?
4. What is your experience with AI tools? How much have you used them?
5. How have you learned to use AI tools? How did you acquire your initial knowledge and in what way have you improved it?

Acknowledgment

Thank you for participating in the study. Your knowledge and efforts are vital in research that focuses on the study of various methods that influence marketing content and materials. Your commitment to furthering the field is greatly appreciated and we sincerely thank you for your active participation.

If you have additional questions, feel free to contact the experiment coordinator Helena Vaht [phone number].

Resümee

TEHISINTELLEKTI POTENTSIAALI HINDAMINE TURUNDUSSISU LOOMISEL

Helena Vaht

Uurimus hindab tehisintellekti rolli turundussisu loomisel, tuginedes 13 sisuturunduse eduteguri (KSF) raamistiku määratlemisele. Teostati eksperimendid, milles võrreldi loodud raamistiku alusel 18 uudiskirja – üheksa loodud koostöös inimese ja tehisintellektiga ning ülejäänud üheksa valmistatud ainuüksi inimese poolt ilma tehisintellekti abita. Eksperimentide tulemused näitasid, et inimeste loodud sisu ületab tehisintellekti abiga loodud sisu. Uudiskirju, mis koostati ilma tehisintellekti abita, hinnati ekspertide poolt kõrgemalt kõikides kategooriates.

Tehisintellekti rolli hinnati empiiriliste katsetega, mistõttu teeb see uuring olulise panuse kirjandusse, kuna pakub arusaama tehisintellekti võimalustest ja piirangutest turundussisu loomisel. Selle uurimuse kaudu välja töötatud ja valideeritud hindamisraamistik täidab mitte ainult olemasolevate empiiriliste uuringute puudusi, vaid pakub ka praktilist tööriista valdkonna spetsialistidele turundussisu kvaliteedi hindamiseks.

Uurimus soovib turundusmaterjalide loomisel inimspetsialistide teadmisi täiustada tehisintellektil põhinevate tööriistadega. Teoreetiline ülevaade näitab, et tehisintellekt suudab turundusspetsialiste toetada erinevate ülesannete täitmisega (sh analüütiliste ülesannetega), mis jätab neile rohkem aega ja vabadust teha loovaid ning strateegilisi tegevusi. Ka praktilised tulemused rõhutavad tehisintellekti tööriistade tõhusa kasutamise tähtsust, näidates, et kasutajad, kellel on tehisintellektiga olemas varasem kokkupuude, suudavad tehisintellektil põhinevaid tööriistu kasutada oskuslikumalt ning saada kvaliteetsemaid tulemusi, kui need, kellel on tehisintellekti tööriistadega minimaalne kogemus.

Kuigi tehisintellekt võib aidata kaasa ülesannete lahendamisel nagu grammatilise korrektsuse tagamise, on inimestel oskus luua emotsionaalselt mõjuvat sisu, mis köidab lugejaid loomulikul teel. Seega on inimese ja tehisintellekti koostöö oluline, et mõlemad osapooled üksteist täiustaksid. Leitud tulemused annavad turundajatele ideid tehisintellekti integreerimiseks ning samas julgustatakse turundajaid tehisintellektil põhinevate tööriistade kasutamise pädevuse kasvatamiseks, võttes osa näiteks erinevatest koolitustest.

Uurimisel on ka piiranguid. Uuringu kordamine suurema valimiga võiks kaasa aidata tulemuste paremale mõistmisele, kinnitamisele ning samas uurida potentsiaalseid täiendavaid mõjutegureid. Seega on täiendavad uurimused vajalikud teema põhjalikuks mõistmiseks.

Lisaks ei pruugi kontrollitud ja struktureeritud eksperimentaalne disain täielikult tabada reaalse turunduskampaania dünaamikaid. Tulevikus võiks välja töötatud KSF-raamistiku rakendamist mitmekesistes turundusformaatides laiendada ja seda just pikemaajaliste kampaaniatele, et tulemusi valideerida ja täiustada. Ühtlasi rikastaks tehisintellekti uurimine erinevates kultuurilistes ja turutingimustes selle ülemaailmset rolli.

Üheks piiranguks on veel uudiskirjade testimise puudumine tegelike tarbijasegmentide peal ja leitud tulemuste mitte hindamine reaalses keskkonnas. See on võimalus edasisteks uurimistöodeks, et anda väärtuslikke teadmisi uudiskirjade edutegurite kohta tegelike digiturunduse mõõdikute põhjal, ning võrrelda kas ekspertide hinnangud kattuvad uudiskirjade saajate ootustega.

Uurimus toob välja kriitilise vaatenurga tehisintellekti rollile turunduses, pooldades integreeritud lähenemist, mille alusel on oluline turunduses kasutada ära tehisintellekti võimalusi, aga samal ajal tugineda jätkuvalt inimekspertide omadustele, mida tehisintellekt ei ole võimeline veel ületama. See lähenemine tagab mitte ainult kvaliteetse ja kaasahaarava sisu tootmise, vaid toetab ka pidevat innovatsiooni ja strateegilist lähenemist turunduspraktikates.