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Impact of Generative Artificial Intelligence (AI) in Content Marketing

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Abstract

This study looks at how generative artificial intelligence (AI) is used in content marketing, focusing on things like awareness, use, effectiveness, efficiency, and new trends. Structured questionnaires were used to gather data from 96 respondents, and chi-square tests and descriptive statistics were used for analysis. The results show that generative AI tools like ChatGPT and GPT-4 are well known and are being used more often, with social media acting as the main exposure channel. Time savings, increased creativity, cost effectiveness, and ease of use were among the main advantages mentioned by respondents. However, issues with over-reliance, ethical dangers, authenticity, and possible job displacement were brought up. Positive views of AI were significantly correlated with higher levels of brand trust and engagement, but there was no discernible difference in the efficacy of content generation between AI users and non-users. The study comes to the conclusion that although generative AI is revolutionizing content marketing, its effective integration requires ethical supervision, AI literacy, and balanced human-AI collaboration.

Keywords: *Generative Artificial Intelligence, Content Marketing, ChatGPT, GPT-4, Brand Engagement.*

Introduction

Artificial intelligence (AI) has garnered significant attention across various fields and sectors. AI is described as the capacity of a system to accurately understand external information, acquire knowledge from that information, and apply that knowledge to accomplish specific objectives and tasks by adapting flexibly. AI has significantly impacted human activities in recent years, notably with the launch of AlphaGo in 2015 and ChatGPT in 2022(Gołąb-Andrzejak, 2023). ChatGPT, an artificial intelligence chatbot introduced by OpenAI in November 2022, has caused a significant stir in the academic community due to its remarkable ability to produce papers deemed satisfactory for publication in academic journals. Prominent publications like Nature and professional organizations such as the World Association of Medical Editors have swiftly taken action by introducing measures to prohibit or limit the submission of papers written by AI. Among the numerous policy changes being implemented, there appears to be a crucial oversight: the challenge of accurately distinguishing AI-generated papers from those authored by humans, compounded by the absence of appropriate tools to enforce the newly established policies. In the absence of such tools, well-meaning policies are at risk of remaining purely theoretical (Hu, 2023).AI has garnered global interest. Since its launch on November 30, 2022, the term "ChatGPT" has been generating increasing search interest on Google. ChatGPT is categorized as a member of the Generative Pre-trained Transformer (GPT), which is a type of language model. The term "GPT" refers to a class of Large Language Models (LLMs) that employ deep learning methods to undergo extended training using vast quantities of data (Fui-Hoon et al, 2023). ChatGPT is a specialized and optimized language model that is specifically built for conversational purposes. It generates responses that resemble human-like conversation by utilizing its extensive information and understanding. ChatGPT's capabilities are facilitated by generative AI, which is a form of artificial intelligence capable of producing language and creative content that resembles human output. It can also gather and analyze data from many sources (Fui-Hoon et al, 2023). According to Damir (2023), ChatGPT successfully deceived individuals into thinking that its responses were generated by humans rather than by artificial intelligence, thus passing the Turing test. The introduction of this cutting-edge AI technology is

anticipated to transform society and reshape our lifestyles, occupations, education, and communication methods.

Generative AI, often known as GenAI, is causing a significant upheaval in the marketing sector. It introduces a new approach to generating marketing content through automation (Peres et al., 2023). Industry assessments indicate that generative AI has significant economic potential, with its influence in the marketing sector alone estimated at USD 463 billion (Chui et al., 2023). Marketing practice and research provide remarkable anecdotal evidence of the disruptive potential of generative AI, as demonstrated by cases cited by Noy and Zhang (2023). Some companies have already tested and used synthetic content generated by generative AI in their marketing campaigns. For example, Heinz's "A.I. Ketchup" campaign, which utilized this technology, received over 850 million earned impressions worldwide and was recognized with an award (Rajaram, and Tinguely 2024).

Due of the significant enthusiasm surrounding generative AI, it is unsurprising that companies have begun to investigate and test this innovative technology. Groundbreaking research showcases the enhanced efficiency and improved output quality achieved through the use of generative AI in automated marketing text production (Reisenbichler et al., 2022). Notable research in fields other than marketing supports these AI-driven advancements, which have measurable economic advantages (Noy and Zhang, 2023). However, because the "age of generative AI" (Krugmann and Hartmann, 2024) is relatively new and there are unique issues related to creating images (Borji, 2023), we have limited knowledge regarding how it can disrupt visual marketing content in various marketing situations.

It is crucial to have a deeper comprehension of the effectiveness and efficiency of AI-generated marketing photography, as images play a fundamental role in modern marketing communications within a progressively media-saturated environment (Dzyabura et al., 2023; Feng et al., 2022). Companies and their advertising firms meticulously create digital advertisements for both online and offline platforms (Hartmann et al., 2021). Influencers receive compensation for promoting brands on several visual networks, with one network referred to as the generator and the other as the discriminator (Banh & Strobel, 2023). The generator aims to generate data that closely resembles genuine data, whereas the discriminator's objective is to distinguish between the synthesized data and the real data. The study "Attention Is All You Need" introduced a neural network design dubbed Transformers, which relies on attention processes instead of recurrence and convolutions (Banh & Strobel, 2023). The utilization of self-attention allows the model to focus on distinct segments of the input sequence when producing the output sequence. These advancements propelled generative AI into a new era of progress and innovation.

Generative AI has the ability to create many types of information, such as text, audio, images, videos, and three-dimensional models. Notable applications include ChatGPT for textual data, Midjourney for visual data, and DeepBrain for video data. The interconnection between these models can be established by the utilization of text-to-image generating models and audio-visual correlation transformers (Wang et al., 2023). The various manifestations of Al-generated content (AIGC) allow for a broad spectrum of applications. Artificial intelligence (AI) can produce written material, such as poems, political declarations (Fui-Hoon et al, 2023), and academic papers (Hu, 2023), that can be difficult to distinguish from information created by humans. Instances of AI-generated images encompass various domains, such as artworks (Fui-Hoon et al, 2023), and synthetic faces (Whittaker et al., 2020), spanning from the humanities to the sciences. Generative AI poses various legal, moral, and ethical concerns. These include copyright infringement in artworks created by AI cheating and plagiarism in educational institutions, data privacy, and security issues (Fui-Hoon et al, 2023), and the potential for malicious use of deepfakes and GANs (Whittaker et al., 2020).

The utilization of generative artificial intelligence in content creation is revolutionizing the way brands engage with consumers in online environments. Brüns & Meibner, (2024) stated in their article that designer Iris von Armin utilizes GenAI to advertise fashion products through

synthetic photoshoots on social media. Levi Strauss & Co, also showcases clothing on personalized GenAI fashion models, while Amazon utilizes GenAI to create captivating product descriptions and advertising visuals (Brüns & Meibner, 2024). According to industry research conducted by Gartner in 2023, it is predicted that by 2025, around 33% of the marketing messages of prominent businesses will be created by GenAI. The swift transition towards extensive utilization generates fundamental inquiries regarding customer responses to firms employing GenAI for digital marketing communications. It is against this background that this study becomes important as it will provide clear users perceptions on the impact of generative AI on content marketing.

Rationale of the Study

Generative AI has the ability to produce significant content, including text, photos, audio, and videos. This unique advancement significantly enhances the capabilities of earlier AI technologies, which mostly concentrated on analytical decision-making tasks (Feuerriegel et al., 2023). Previous research has presented a theoretical perspective on the significant influence of GenAI on marketing strategies (Peres et al., 2023) and highlighted its crucial role in social media content marketing (Wahid et al., 2023). The COVID-19 epidemic has significantly changed the way consumers and brands communicate, with a greater emphasis on online platforms. Marketers may now utilize GenAI to effectively engage consumers through the creation of large-scale creative content. In order to maintain a strong digital presence, shops must have a comprehensive understanding of how their followers perceive AI-generated material on social media (Guha et al., 2021). Despite the existence of numerous studies on generative AI, there is a lack of research on consumer views towards generative AI content. Additionally, there is a dearth of studies that explore the impact of generative AI on content generation and marketing, specifically in Nigeria. The justification for this approach is based on the observations made by Pereset al (2023), who pointed out that the empirical research on GenAI content generation has predominantly focused on two specific areas. A body of research has investigated how GenAI can assist marketing professionals in carrying out content marketing. These studies have shown that GenAI has a beneficial impact on financial returns, worker productivity, and quality (Noy and Zhang, 2023).

Another group has examined potential applications for marketers and discovered that GenAI can provide value by incorporating artistic styles into visual marketing content (Wang et al., 2023) and automating the creation of personalized persuasive messages (Matz et al., 2023). Regarding social media, current literature evaluations (Brüns & Meibner 2024). have shown that there is marketing research dedicated to utilizing analytical AI techniques for content analysis. However, there is still a requirement to examine user responses to innovative GenAI content. It is essential to address the identified research gap in order to develop a comprehensive understanding of GenAI and to support the demand for transparency in the use of GenAI by regulators. Enforcement of transparent disclosure of AI-generated content is required, as stated in the White House study (2023). Regulation is crucial in safeguarding and empowering consumers who, as evidenced by Banh & Strobel (2023) frequently struggle to differentiate between GenAI and human-generated material.

Study Aims and Objectives

This research investigates how generative AI technologies are reshaping content creation, enhancing marketing strategies, and influencing consumer engagement. However, the specific objectives are to:

1. Evaluate the benefits of generative AI in content creation
2. Investigate consumer perception and engagement with AI-Generated content.
3. Explore Future Trends and Innovations in Generative AI for Content Marketing

Research Questions

The following research questions will guide the study

1. What are the customers perceived advantages and downsides of AI-generated content and how do these views influence their brand engagement and trust?
2. How does the utilization of generative AI in content marketing influence the effectiveness and efficiency of content creation procedures?
3. What are the forthcoming trends and advancements in generative AI technology for content marketing, and how should marketers ready themselves for these developments?

Literature Review

The growing application of Generative Artificial Intelligence (GenAI) has significantly transformed the marketing landscape. Recent reports show that by March 2023, 73% of American corporations were already integrating GenAI tools such as chatbots into their marketing operations (Wong, 2024). Similarly, Gołąb-Andrzejak (2023) projected a sharp rise in the value of the AI marketing industry, from $15.84 billion in 2021 to $107.5 billion by 2028. This rapid adoption is largely due to GenAI's ability to create tailored, engaging content that enhances customer experience across digital platforms. According to Kshetri et al. (2023), such experiences have a direct link to increased customer loyalty and business performance, reinforcing the value of GenAI in marketing strategies. In addition to enhancing customer interactions, Artificial Intelligence (AI) more broadly plays a crucial role in marketing decision-making. As highlighted by Vlacic et al. (2021), AI leverages data to support fast, data-driven decisions that improve productivity and competitiveness. Companies like Amazon and Spotify are optimizing their campaigns through AI, especially by using chatbots to deliver efficient and responsive customer service (Matz et al., 2023). Furthermore, marketers are increasingly utilizing AI to analyze consumer patterns and fine-tune strategies, giving businesses a long-term competitive edge (Rajaram & Tinguely, 2024).

Of particular interest is the rise of Generative AI, a subfield of AI that produces new content such as text, graphics, and video. Tools like ChatGPT and BARD, based on models such as GPT-4 and PaLM, allow users to generate scripts, captions, and visual ideas for social media content (Wang et al., 2023). As noted by Gołąb-Andrzejak (2023), GPT-4 excels not only in content generation but also in collaboration modifying and refining work in real time. Beyond social media, GenAI applications extend to e-learning, voice replication, deepfakes, and other forms of synthetic media (Banh & Strobel, 2023; He et al., 2019). However, while these capabilities offer innovation, they also raise ethical concerns, particularly with technologies like deepfakes that can manipulate public perception (Güera & Delp, 2018; Yu et al., 2021). Moreover, GenAI is reshaping content creation in marketing. Traditionally, marketers manually developed promotional content, but GenAI now streamlines this process by analyzing market data and suggesting ideas likely to resonate with audiences (Sands et al., 2024). Despite concerns about emotional depth, recent findings suggest AI-generated advertisements can rival or even surpass human-created content in effectiveness. According to Feuerriegel et al. (2023), platforms like ChatGPT and Midjourney empower marketers to generate entire campaigns using natural language prompts. This shift opens new doors for automation, where firms can choose to fully automate content creation, maintain human oversight, or not adopt GenAI at all (Brüns & Meibner, 2024).

Beyond content creation, GenAI presents strategic advantages in sectors like business, healthcare, and education. It supports tasks from personalized learning to diagnostic assistance (Fui-Hoon et al., 2023). Banh and Strobel (2023) emphasized that collaboration between humans and AI enhances innovation and problem-solving. For example, educators use ChatGPT to improve classroom delivery, while marketers rely on it for ideation. As such, GenAI contributes significantly to efficiency and cost-effectiveness, particularly in generating visual content for marketing campaigns (Dzyabura et al., 2023; Hartmann et al., 2021). Nevertheless, the misuse of GenAI presents serious risks. The technology has been linked to plagiarism, exam cheating, and

privacy violations (Dwivedi et al., 2023; Porter, 2023). Given its ability to produce high-quality responses quickly, students and professionals might misuse GenAI to bypass genuine effort. Additionally, data security concerns remain a pressing issue, as these models often rely on sensitive personal information during training (Fui-Hoon et al., 2023). Deepfake content and algorithmic bias further complicate ethical considerations, making it essential to ensure that training data is representative and inclusive (Zhuo et al., 2023).

Looking ahead, GenAI is expected to drastically reduce the cost of creating marketing visuals. As Hartmann et al. (2024) noted, producing a high-quality image with DALL·E 3 may cost only a fraction of what traditional methods require. Compared to thousands of dollars spent on professional agencies and stock photos, GenAI enables businesses to achieve scalability and efficiency at minimal cost (Rodgers, 2021). This technological shift makes it increasingly attractive for global marketing teams to adopt GenAI for large-scale content production. Concerning consumer perception, existing evidence suggests that audiences often cannot distinguish between human and AI-generated content. Huschens et al. (2023) found that even when participants were informed that content came from ChatGPT, they rated it as equally credible and persuasive. Similarly, Reisenbichler et al. (2022) revealed that AI-generated marketing text often matches or exceeds the quality of human-written content. However, Xu and Mehta (2022) caution that inappropriate AI use—such as mismatched product design—can negatively affect consumer trust. Moreover, the rise of AI-generated virtual influencers, such as BMW's partnership with Lilmiquela, has received mixed reactions, showing that context and transparency are crucial (Rizzo et al., 2023).

Empirical studies further reinforce the effectiveness of GenAI. Zhang and Gosline (2023) showed that AI-generated content is often perceived as higher quality, especially when consumers are unaware of its origin. Similarly, Gołąb-Andrzejak (2023) confirmed the growing influence of ChatGPT in campaign design, while Huschens et al. (2023) noted that GenAI content was consistently rated as more persuasive and coherent, with no significant difference in perceived credibility. In conclusion, the literature clearly establishes GenAI's growing impact on marketing, particularly in enhancing personalization, content generation, and efficiency. However, there remains a knowledge gap regarding how consumers, especially in developing contexts like Nigeria, perceive AI-generated marketing content. This study seeks to explore not just the role of GenAI in marketing but also consumer attitudes toward its use in content creation.

Conceptual Framework

The conceptual framework for the study presents the variables of the study and is clearly shown below:

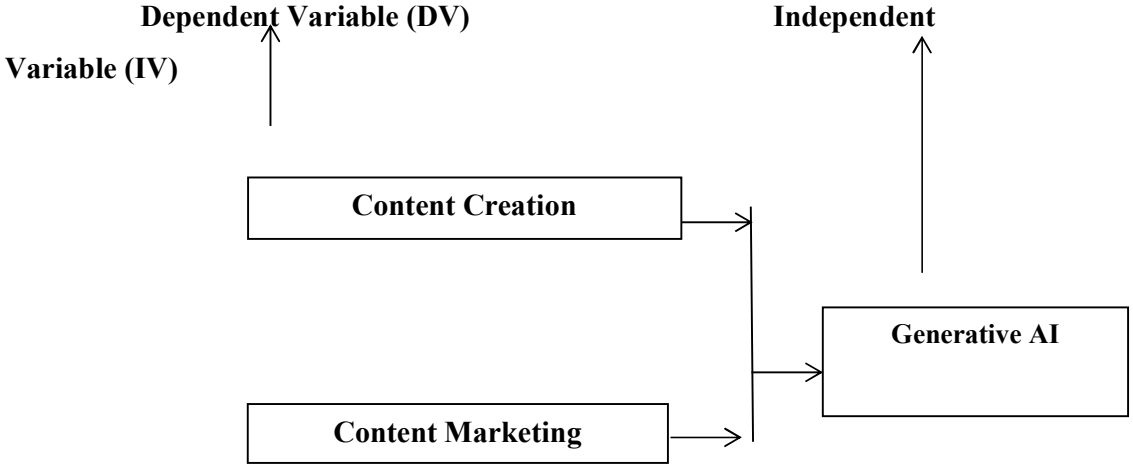

Fig 1: Conceptual Framework

Methodology

This study utilized a survey method with questionnaires to collect data from stakeholders regarding generative AI's impact on content marketing. Purposive sampling was applied to focus on specific cultural contexts requiring specialized knowledge. Descriptive statistics summarize and describe the characteristics of a data set (Larson, 2006). In this study, SPSS was used to analyze descriptive statistics and evaluate hypotheses derived from the online survey results. This approach enabled a cohesive primary data presentation, resulting in a quantified interpretation of the findings (Ali, 2021).

Participants provided responses via questionnaires, emphasizing the importance of ethical data collection throughout. A chi-square ($\chi 2$) test was also employed to investigate variable relationships, allowing for targeted data generation aligned with the research questions and hypotheses. Some data underwent recoding to ensure compliance with the chi-square test, enhancing the robustness and accuracy of the analysis of variable associations.

Ethical Considerations

To ensure ethical rigor, the research adhered to institutional guidelines and secured ethics approval prior to data collection. Participant anonymity was prioritized through private data processing, secure storage, and data de-identification. By adhering to ethical standards, the research upheld its integrity while safeguarding participants' rights and privacy. Researchers implemented thorough protocols to maintain these ethical principles, thereby cultivating trust with participants. This commitment to ethical norms enhanced the research's credibility and bolstered the validity of the findings.

Analysis of the data

This section presents an analysis of the data collected for this thesis. Descriptive statistics were employed to summarize key trends, percentages, and frequencies, providing insights into participant demographics and response patterns. Chi-square tests were used to answer the research questions by cross-tabulating various variables. The descriptive analysis is divided into five sections: socio-demographic characteristics, awareness and use of generative AI, its impact on content creation, consumer perception and engagement, and future trends in generative AI for content marketing. SPSS was used for data processing, ensuring a systematic and reliable analysis.

2.1 Socio-demographic

Table 2.1: *Demographic characteristics of participants*

Socio-demographic	Frequency	Percent
Age		
18-25	3	3
26-30	50	52
31-35 and older	43	45
Total	96	100.0
Place of residence		
Abuja	10	10.4
Enugu	64	66.7
Lagos	18	18.8
Porthaercourt	4	4.1
Total	96	100.0
Years of experience in content marketing		
less than 1year	37	39
1-3years	45	47
4-6years	11	11
7-10years and more	3	3
Total	96	100.0

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

The age distribution of the respondents revealed that most were young adults. Specifically, 52% were aged 26-30, and 45% were aged 31-35, indicating that nearly all participants fell within these two groups. Only 3% were 18-25, suggesting minimal representation from younger individuals. This concentration of young to mid-career adults may reflect the age group typically attracted to content marketing or related fields. In terms of place of residence, there was a strong regional focus. Most respondents (66.7%) resided in Enugu, with smaller proportions from Lagos (18.8%), Abuja (10.4%), and Port Harcourt (4.1%) This heavy representation from Enugu could highlight a regional interest in content marketing. Also, it might be attributed to its status as a hub for young adults, with multiple higher educational institutions and a population keenly attuned to technology. This educational and technological inclination likely fosters engagement with fields such as content marketing and other digital industries. Regarding years of experience in content marketing, respondents primarily had limited experience. Nearly half (47%) reported having 1-3 years of experience, while 39% had less than a year. Only a small fraction (11%) had 4-6 years, and an even smaller group (3%) had over 7 years of experience. This suggests that content marketing is a field attracting newer professionals or experiencing high turnover, with limited representation from seasoned experts. Consequently, the study's insights may reflect early-career perspectives more than those of long-standing professionals.

2.2 Awareness and Usage of Generative AI

Awareness

The findings on the awareness of generative AI tools such as ChatGPT, GPT-4, and DALL-E reveal that out of a total of 96 participants, the vast majority of respondents are aware of AI technologies, specifically, 89 persons (93%) reported being aware of generative AI, whereas just 7 participants (7%) said they were unaware. This study demonstrated a high degree of awareness of generative AI technology, reflecting high levels of familiarity and possibly indicating a demographic inclined towards technology or digital tools. It is worth noting that there were only 93 responses rather than the predicted 100, indicating that some participants did not finish the survey. This was better presented below.

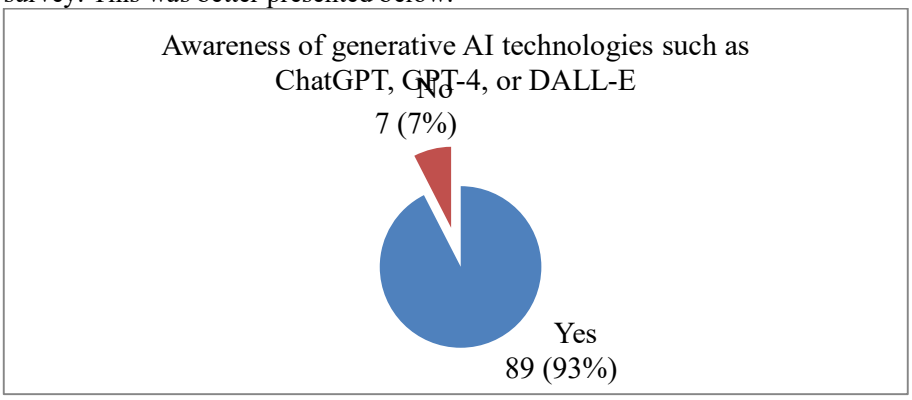

Figure 1

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

The data on how respondents first learned about generative AI tools shows that out of 89 respondents who said they were aware of generative AI tools like ChatGPT, GPT-4, and DALL-E, social media was the most common source of information, with 46 (52%) citing it as their first point of exposure. Online articles were the second most popular source, accounting for 27 participants (30%). Word of mouth spread, with 13 participants (15%) discovering these resources through personal networks. Industry conferences were the least popular source, indicated by only three participants (3%). This distribution shows that informal, broadly accessible channels, notably social media, play an important role in increasing user knowledge

of generative AI technologies. It is worthy to note that the responses of 7 participants (8%) were recorded as "not applicable," as they had previously noted a lack of awareness about AI. Hence, their responses were excluded from the figure below.

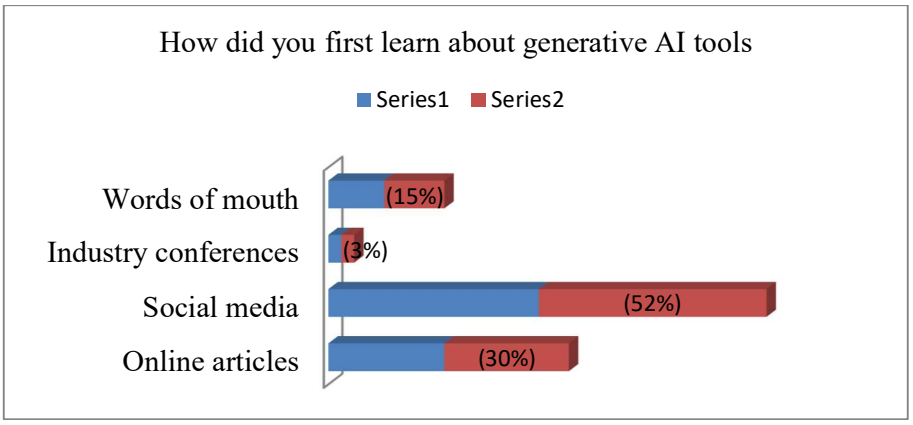

Figure 2
Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

Usage of Generative AI

Table2. 2.1: *Percentage distribution of respondents by their interaction with AI* (N=89)

Response	Frequency	Percentage (%)
Frequently	45	47
Occasionally	35	36
Not sure	7	7
Never	2	2
Not applicable	7	8
Total	**96**	**100.0**

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

According to the study's findings on table 2.2, the majority of participants indicated interacting with AI to some extent, with 47% noting that they, engaging frequently with AI and 36% occasionally, showing a high level of usage or familiarity among respondents. Only 7% were unsure about their interaction level, and 2% had never interacted with AI ever before. While 8% of the total participants' responses were inapplicable since they had previously said that they were unaware of AI. Overall, the findings show that 90% of participants use AI at least occasionally, showing a high degree of usage and awareness with AI technology.

Table2.2.2: Percentage distribution of respondents by type of AI generative content they have used or interacted with. (N=89)

Maximum unit load	Frequency	Percentage (%)
Text (blog post, news articles	33	34
Images (Arts, graphics	20	21
Videos(AI edited Videos, Deepfake	14	14
Audio (AI generated Voiceover	16	17
Others (please specify)	3	3
None of the above	3	3
Not applicable	7	8
Total	96	100.0

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

The findings in Table 2.2.2 revealed that the vast majority of respondents (34%) have engaged with text-based generative AI material, such as blog posts or news stories, which is the most common form of AI-generated content used. Images, including arts and graphics, followed with 21%, showing significant engagement in visual AI applications. Audio and video content, such as AI-generated voiceovers and AI-edited or deepfake videos, attracted 17% and 14% of respondents, respectively, illustrating a diverse range of interactions beyond text. Additionally, 3% of participants specified other types of AI-generated content they had used, such as AI-generated music or code. Also, another 3% indicated "None of the above," which, indicated that they have not interacted with any of the listed form or type of AI generated content. While 8% of responses were marked "Not applicable" due to the respondents' lack of familiarity with generative AI tools. This distribution reveals a broader engagement with text-based AI tools.

2.3 Impact of generative AI in content creation

The importance of generative AI in content marketing was highlighted in this sub-section, through participants' or respondents' expertise or experience. This impact is the result of time savings, improved content quality, and more innovation.

Table 2.3.3Impact of using generative AI in content marketing

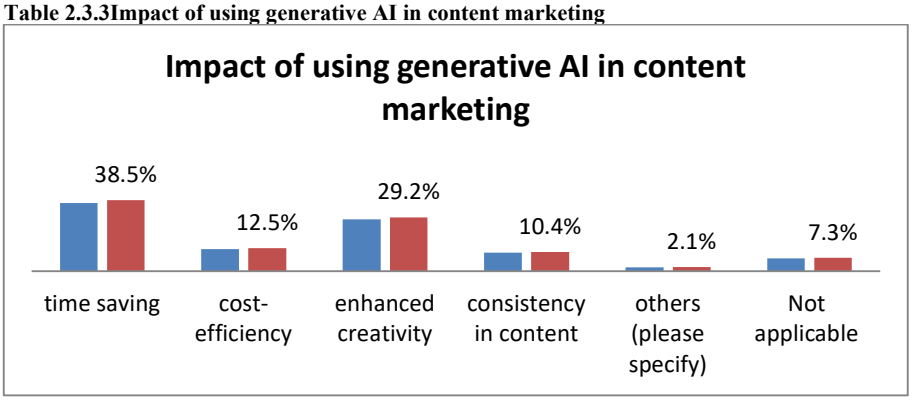

Figure 3

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

According to the data, the most significant upside of generative AI in content marketing is time savings, which was reported by 38.5% of respondents, followed by increased creativity at 29.2%. Cost-efficiency and content consistency were highlighted by 12.5% and 10.4% of participants, respectively, emphasizing their importance in lowering costs and preserving brand continuity. Only 2.1% recognized further particular impact such as improved personalization of content, and 7.3% response was not applicable due to their lack of knowledge about generative AI. Overall, the results underline the broad value of generative AI, notably in boosting efficiency and creativity, with considerable diversity in perceived relevance.

Table 2.3.4 Respondents view have on the impact of generative AI tool on content quality

Response		Frequency	Percentage
	improved significantly	44	45.8
	improved slightly	40	41.7
	no change	4	4.2
	Decreased slightly	1	1.0
	Not applicable	7	7.3
Total		96	100.0

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

The findings indicate that the majority of respondents believe generative AI tools have a positive impact on content quality, with 45.8% stating that quality has improved significantly and 41.7% reporting slight improvements. Only 4.2% observed no change, while a minimal 1.0% felt content quality decreased slightly. Meanwhile, 7.3% response was not applicable due to their lack of knowledge about generative AI. Overall, these results suggest that generative AI is largely seen as enhancing content quality, though the degree of improvement varies among users.

Table 2.3.5 Impact of generative AI in scaling content production

Response		Frequency	Percent
	highly beneficial	33	34.4
	Beneficial	38	39.6
	Neutral	12	12.5
	slightly beneficial	6	6.3
	Not applicable	7	7.3
Total		**96**	**100.0**

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

The findings show that a high number of respondents view generative AI as beneficial in scaling content production, with 39.6% describing its impact as "beneficial" and 34.4% as "highly beneficial." A smaller proportion, 12.5%, maintained a neutral stance, while 6.3% found it only slightly beneficial. Meanwhile, 7.3% indicated that generative AI was not applicable to their content production efforts. These findings shows that generative AI is widely recognized for its value in enhancing content scalability, though its perceived impact varies in intensity among users.

Table 2.3.6 Respondents view on generative AI impact on creativity

Response		Frequency	Percentage
	strongly agree	27	28.1
	Agree	52	54.2
	Neutral	9	9.4
	Disagree	1	1.0
	Not applicable	7	7.3
Total		**96**	**100.0**

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

The data generated from the field, on table 2.3.6 revealed that a high percentage of respondents are of the opinion that generative AI has a good influence on creativity, with 54.2% agreeing and 28.1% strongly agreeing. A smaller percentage, 9.4%, remained indifferent, with only 1.0% disagreeing. Furthermore, 7.3% response was not applicable due to their lack of knowledge about generative AI. Overall, these findings indicate that generative AI is commonly viewed as a tool for enhancing creative processes, albeit a tiny percentage remains skeptical or unmoved by its creative potential.

2.4 Consumer perception and engagement with AI-generated content

Table 2.4.7 Perception on the Impact of generative AI on the quality of content marketing.

Response		Frequency	Percentage
	very positive	24	25.0
	Positive	51	53.1
	Neutral	14	14.6
	Not applicable	7	7.3
Total		**96**	**100.0**

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

According to the data in Table 2.4.7, the majority of respondents believe that generative AI has a good influence on content marketing quality, with 53.1% considering it as positive and 25.0% as extremely positive. Meanwhile, 14.6% remained indifferent, and 7.3% response was not applicable due to their lack of knowledge about generative AI. These findings indicate that

generative AI is generally recognized for its potential to improve content marketing quality, with the majority of respondents expressing a favorable opinion.

Table 2.4.8 Perception of respondents on AI generated content affecting content authenticity negatively

Response		Frequency	Percentage
	A great extent	27	28.1
	some extent	34	35.4
	Neutral	19	19.8
	A little extent	6	6.3
	not at all	3	3.1
	Not applicable	7	7.3
Total		**96**	**100.0**

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

Table 2.4.8 above reveals that a significant number of respondents perceive AI-generated content has a negative influence on content authenticity, with 28.1% feeling it is very true and 35.4% believing it is somewhat true. Furthermore, 19.8% were unconcerned, while smaller percentages claimed minimal effect, with 6.3% indicating "a little extent" and 3.1% expressing "not at all." Meanwhile, 7.3% of the responses were not applicable because of their lack of expertise of generative AI. These findings reflect widespread concern about potential authenticity issues in AI-generated material.

Table 2.4.9 Perception of respondents on reliance on generative AI and it impact on job opportunities in content marketing.

Response		Frequency	Percentage
	A great deal	33	34.4
	Some what	27	28.1
	Neutral	20	20.8
	A little	5	5.2
	not at all	4	4.2
	Not applicable	7	7.3
Total		**96**	**100.0**

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

The findings above indicate that participants have differing views on the use of generative AI and its impact on job opportunities in content marketing. A high proportion of respondents, 34.4%, feel that reliance on generative AI impacts employment possibilities to "a great deal," while 28.1% believe that it "somewhat" hinders job opportunities. 20.8% of responses are neutral, indicating mixed or uncertain feelings. A smaller minority feels the influence is insignificant, with 5.2% replying "a little" and 4.2% responding "not at all" to the question. It is worth noting that the responses from 7.3% were inapplicable here owing to their previous admission of a lack of awareness of AI-generated content.

Table 2.4.10 Perception of respondents on using generative AI in content marketing and the possibility of leading to dependency on technology

Response		Frequency	Percentage
	strongly agree	37	38.5
	Agree	28	29.2
	Neutral	19	19.8
	Disagree	5	5.2
	Not applicable	7	7.3
Total		**96**	**100.0**

Source: *Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).*

The findings in Table 2.4.10 indicate respondents' perceptions on whether utilizing generative AI in content marketing may lead to technological reliance. A significant number of respondents "strongly agree" (38.5%) and "agree" (29.2%) with this idea, demonstrating broad

worry about the risk for overreliance on AI tools. Meanwhile, 19.8% remain "neutral," indicating some degree of confusion or ambivalence. Only a tiny percentage "disagree" (5.2%) with the premise, while 7.3% were not applicable here owing to their previous disclosure of a lack of awareness regarding AI-generated material.

Table 2.4.11 Perception of respondent on the ease of use of generative AI tools

Response	Frequency	Percent
very easy	36	37.5
Easy	41	42.7
Neutral	12	12.5
Not applicable	7	7.3
Total	**96**	**100.0**

Source: *Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).*

Table 2.4.11 reveals respondents' perception on the ease of use of generative AI technology. The greater number found the tool to be user-friendly, with 42.7% indicating that they are "easy" and 37.5% as "very easy." This reveals a solid agreement on the accessibility of generative AI technology. Meanwhile, 12.5% of respondents were "neutral," indicating uncertainty or conflicting opinions regarding the accessibility of use. A small percentage (7.3%) was inapplicable here since they had previously admitted to being unaware of AI-generated content.

2.5 Future trends and innovations in generative AI for content marketing

This sub-section presents findings on the future of generative AI in content marketing, offering direct insights into the study's final objective: exploring future trends and innovations in generative AI for content marketing.

Table 2.5.12 in your opinion will AI generated content become more integrated into everyday life and business practice in the future

Response	Frequency	Percentage
definitely yess	41	42.7
probably yes	31	32.3
Unsure	13	13.5
probably no	4	4.2
Not applicable	7	7.3
Total	**96**	**100.0**

Source: Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).

The findings indicate a significant conviction in the eventual incorporation of AI-generated material into daily living and business activities in the future. A huge majority of respondents, 42.7%, said "definitely yes," with 32.3% saying "probably yes," indicating widespread confidence about AI's growing importance. However, 13.5% were "unsure," indicating some ambiguity regarding the trajectory. A tiny fraction, 4.2%, leaned toward skepticism with "probably no," and 7.3% considered the question "not applicable," maybe indicating no relevance to their current situation.

Table 2.5.13 How will generative AI change the future of content marketing

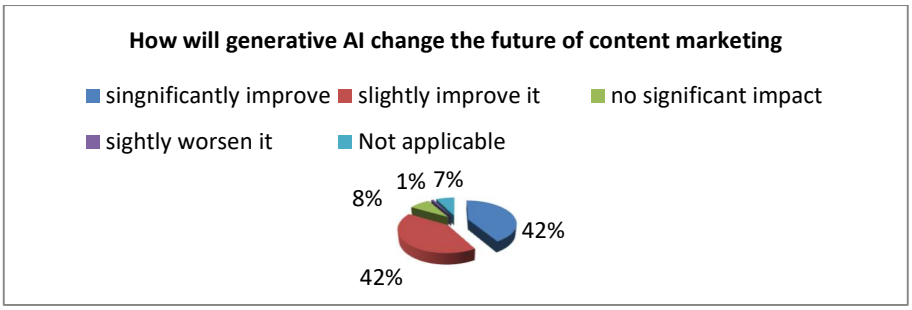

Figure 4

Source: *Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).*

The data above show that generative AI could be commonly regarded as a game-changer in content marketing in the future. Same amount of respondents (41.7%) noted that it will "significantly improve" or "slightly improve" the field of content marketing in the future indicating a broad consensus on its beneficial impact. A smaller number of respondents (8.3%) noted "no significant impact," implying doubts about AI's transformational potential for the future. Only 1% expect it will "slightly worsen" content marketing, while 7.3% were not applicable here owing to their previous disclosure of a lack of awareness regarding AI-generated material." These results, based on fieldwork done in 2024, indicate that most respondents expect generative AI would boost content marketing, albeit to various degrees in the future.

2.6 chi-square test

Under this sub-heading, the chi-square (χ^2) test will be used to cross-tabulate variables in order to answer the research questions raised in this study. The primary goal of using the Chi-square test is to determine if a significant relationship exists between the variables, thus providing clear and reliable answers to the research inquiries. In this analysis, two independent variables were cross-tabulated with three dependent variables, allowing for an exploration of how engagement with artificial intelligence (AI) influences perceptions of AI-generated content, brand engagement, and the effectiveness of content creation processes. Additionally, some of the data were re-coded to simplify the analysis and ensure meaningful comparisons across the variables.

The chi-square tests in this study address three key research questions. The first question examines the relationship between customers' perceptions of AI-generated content and their level of brand engagement and trust. The second question investigates the impact of generative AI use on the perceived effectiveness and efficiency of content creation processes. The third question explores how the extent of engagement with AI influences perceptions of its future role and trends, particularly in content marketing. The results from these chi-square tests provide valuable insights into the strength of associations between these variables, contributing to a deeper understanding of AI's role in content marketing and its potential for future integration.

Research question one

Is there a significant relationship between customers' perceptions of AI-generated content and their level of brand engagement and trust?

Table 2.2.13: Customers' perceptions of AI-generated content and their level of brand engagement and trust

Perception of AI-generated content	**Level of Brand engagement or t trust**		**Total**
	High	**low level**	
Positive	58(95.1%)	3(4.9%)	61(100.0%)
Negative	17(60.7%)	11(39.3%)	28(100.0%)
Total	**75(84.3%)**	**14(15.7%)**	**89(100.0%)**

$\chi 2$=17.100 df=1, p< .000 critical value = 0.05

Source: *Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).*

The table above investigates how customers' perceptions of AI-generated content affect their brand engagement and trust. Data from Table 2.2.13 reveal a considerable influence. 95.1% of those with a positive perception expressed high levels of involvement or trust, compared to 4.9% who reported low levels. In contrast, among those with a negative view, 60.7% expressed strong involvement or trust, while 39.3% reported low levels. Overall, 84.3% of consumers indicated strong involvement or trust, and 15.7% reported poor levels. The chi-square test (χ^2 = 17.100, p =.000) demonstrates a statistically significant association between perceptions of AI-generated content and brand engagement/trust. These findings immediately respond to the study question, providing unambiguous proof of a significant relationship between consumer perceptions and their degree of involvement and trust.

Research question Two

To what extent does the use of generative AI in content marketing impact the perceived effectiveness and efficiency of content creation processes?

Table 2.2.14: Use of generative AI in content marketing and perceived effectiveness and efficiency of content creation processes

Use of generative AI in content marketing	perceived effectiveness and efficiency		**Total**
	Highly Effective and efficient	**Not Effective and efficient**	
Use	66(88.0%)	9(12.0%)	75(100.0%)
Not use	14(100.0%)	0(00%)	14(100.0%)
Total	**80(89.9%)**	**9(10.1%)**	**89(100.0%)**

$\chi 2$=1.869 df=1, p< .172 critical value = 0.05

Source: *Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).*

The findings address the gap in providing answer to the research question *"To what extent does the use of generative AI in content marketing impact the perceived effectiveness and efficiency of content creation processes?"* by highlighting both the prevalence of positive perceptions among users and the statistical relationship (or lack thereof) between AI use and these perceptions. Specifically, 88.0% of generative AI users reported their processes as highly effective and efficient in *content creation processes,* compared to 100% of non-users. However, the chi-square test (χ^2 = 1.869, p = 0.172) reveals that the difference is not statistically significant. This suggests that while generative AI may be associated with higher perceived effectiveness and efficiency, its impact is not strong enough to be considered significant based on this data. The findings address the gap by providing evidence that the perceived impact of generative AI on content creation processes, in terms of effectiveness and efficiency, is limited. In other words, generative AI's influence does not significantly differ from traditional methods, suggesting its perceived contribution to content marketing outcomes is minimal.

Research question Three

How does the extent of engagement with artificial intelligence influence perceptions of its future role and trends?

Table 2.2.15: interaction with AI and AI generated content become more integrated into everyday life and business practice in the future

Perception of Future integration of AI	perceived interaction		**Total**
	High interaction	**No interaction**	
Future integration	31(75.6%)	10(24.4%)	41(100.0%)
No future integration	14(29.2%)	34(70.8%)	48(100.0%)
Total	**45(50.6%)**	**44(49.4%)**	**89(100.0%)**

$\chi 2$=19.081 df=1, p⌿ .000 critical value = 0.05

Source: *Research Data Collected by Edoga Chibueze Nnabuikem on the Impact of Generative AI in Content Marketing (2024).*

The finding reveals a significant relationship between the level of interaction or engagement with AI and the opinions on the future integration of AI-generated content into everyday life and business practices. Respondents with high interaction with AI believe that AI-generated content will become more integrated in the future, with 75.6% of them expressing a positive outlook. In contrast, those with no interaction with AI were less optimistic, with only 24.4% supporting the idea of future integration. Statistical tests (Chi-square and Fisher's Exact Test) further reinforce this relationship, showing that the differences in opinions are statistically significant (p-value < 0.05), suggesting that higher engagement leads to more positive perceptions about AI's future trends and integration. This finding confirms that those who engage more with AI are more likely to view it as a transformative force in content creation and business practices, which is central to the research question's exploration.

Interpreting descriptive Findings: Insights from Empirical Data collected and Literature

The rapid growth of Generative Artificial Intelligence (GAI) in marketing, particularly content creation, is well-documented in the literature, and the findings from the study on the awareness and usage of these tools reinforce this trend. Several studies corroborate the increasing recognition and adoption of AI technologies in marketing, emphasizing GAI's substantial role in shaping content strategies. Wong (2024) notes that 73% of American corporations had already incorporated GAI tools like chatbots into their marketing strategies by March 2023, underscoring the swift adoption across industries. This aligns with the study's finding that a large majority of participants are aware of generative AI tools, such as ChatGPT and GPT-4, with social media being a key source of information—confirming the trend highlighted by Hu (2023) and Wang et al. (2023) on informal platforms being essential for spreading knowledge about AI tools. Moreover, Kshetri et al. (2023) and Grewal et al. (2021) emphasize the personalized customer engagement that GAI facilitates. This was echoed in the study's results, where participants highlighted the efficiency and personalized nature of AI-generated content, especially in text, images, and multimedia.

Also, the present findings revealed that generative AI (GAI) improves content marketing efficiency, creativity, and cost-effectiveness. According to the study's findings, participants see a number of impacts or benefits from AI-generated content, the most significant of which are time savings and increased creativity. This is congruent with the research, which highlighted the impact of generative AI in scaling up the content development process. Mbotake (2024) observes that traditional content generation is typically time-consuming and labor-intensive, necessitating significant human effort in conception, writing and editing. However, generative AI automates these processes, allowing marketers to create large volumes of content quickly and efficiently. Similarly, Nalini et al. (2021) and Israfilzade (2023) demonstrate how AI-powered systems like

as GPT and Gemini can generate articles, blog entries, and social media updates in minutes. This automation not only saves time but also allows content marketing teams to consistently create high-quality content, which is essential for audience engagement and improved search engine rankings.

Furthermore, the study's findings reveal a strong belief in the long-term integration of AI-generated content into everyday living and commercial operations. The majority of respondents believe AI will play an increasingly crucial role, with many seeing it as a game changer in content marketing. This optimism is in line with bigger corporate trends, which emphasize future use of generative AI technology to improve customer contact and marketing operations. This finding aligns closely with the conclusions of Garg et al. (2021) and Nwachukwu & Affen (2023), who emphasized that AI will play an increasingly pivotal role in shaping the future of customer engagement and marketing. They highlighted AI's growing ability to predict and map customer journeys with remarkable precision, offering insights not only into potential future purchases but also into the timing, preferred channels, and types of messages that will most effectively influence customer decisions. This predictive power is expected to evolve further, enabling businesses to anticipate customer needs before they are even expressed, thereby fostering a proactive approach to customer engagement.

Chi-Square Findings and Implications

Chi-square tests revealed key insights: there was a significant link between positive perceptions of AI and high brand engagement ($\chi^2 = 17.100$, $p = .000$), supporting Huang & Rust (2021). However, no significant difference was found in perceived effectiveness between users and non-users ($\chi^2 = 1.869$, $p = .172$), suggesting traditional methods may still be competitive. Lastly, prior AI experience strongly influenced optimism about its future role ($\chi^2 = 19.081$, $p = .000$), consistent with Brynjolfsson & McAfee (2022).

Conclusion

In sum, while GAI offers clear benefits in marketing, including enhanced creativity and efficiency, concerns around authenticity, job displacement, and ethical use must be addressed. The findings underscore the importance of responsible integration, AI literacy, and a human-centered approach to ensure GAI's long-term value.

Recommendations

The study recommends that, future research should include longitudinal designs in order to properly assess the long-term effects of generative AI on content marketing strategy and client engagement. Expanding the participant pool to include a larger and more diverse sample, such as marketers from other sectors and consumers from other demographics, may increase the results' generalizability. Furthermore, researchers are encouraged to delve further into ethical concerns such as data privacy, content authenticity, and discrimination, as well as to develop robust legislative frameworks to oversee responsible AI use. Mixed methods research, which incorporates qualitative and quantitative approaches, as well as AI-powered data collection systems, may provide richer and more nuanced insights on the rising role of generative AI. Finally, given the rapid advancements in AI, future research frameworks should be regularly updated to reflect the most recent trends and technologies in generative AI.

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