



## GENERATIVE AI TOOLS AND DIGITAL MARKETING CONTENT CREATION AMONG BUSINESS EDUCATORS IN TERTIARY INSTITUTIONS IN CROSS RIVER STATE

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### Abstract

*The study assessed GenAI tools and digital marketing content creation among business educators in Cross River State. Two specifically purposes guided the study and were developed into two research questions and null hypotheses. Correlational research design was adopted for the study. The population comprised 95 business educators in four tertiary institutions offering business education programme in Cross River State. Data was collected with the help of two separate instruments: Generative Artificial Intelligence Tools Rating Scale (GAITRS) and Digital Marketing Content Creation Scale (DMCCS). Both instruments were validated by experts and tested for reliability using Cronbach Alpha reliability coefficient to determine their internal consistency. Results obtained were as follows: GAITRS, cluster 1 (0.86); cluster 2 (0.87). Its overall reliability result was 0.89. DMCCS yielded 0.96. A total 87 copies of the instruments out of 95 administered were completed and successfully returned. Data was analysed using linear regression in SPSS. Findings indicated that ChatGPT and Grammarly are significant in their relationship to digital marketing content creation. They demonstrated high positive relationship and can contribute effectively to digital marketing content creation by 37% and 31% respectively. The implication of the findings is that automation of complex creative tasks like digital content creation may demand new skill gaps. Business educators and marketers must be prepared to develop new competencies including prompt engineering, AI oversight, and critical evaluation of AI outputs to remain relevant and competitive. The study recommended among others that business educators should adopt best practices that balance automation with human creativity and responsibility in the use of GenAI.*

**Keywords:** *Generative AI tools, Digital Marketing and Content Creation*

### INTRODUCTION

Digital marketing content creation has become a central driver of audience engagement, brand visibility, and competitive advantage in today's digitally mediated economy. Digital marketing involves the promotion of products or services using technologies, mainly on the internet and other online platforms like email, websites, apps, social media and search engines. Adie et al. (2025) defined digital marketing as an arrangement between a seller and buyer to exchange product or service for money using technologies and online channels. It is an aspect of marketing that uses digital based technology including desktop, mobile phone, mobile apps and other digital media (Kumari, 2024). Digital marketing aimed to create brand awareness, and promote consumers engagement, interactivity, connectivity and relationship. Digital marketing requires effective



online communication with existing customers and reaching out to potential ones to attract sales and increase profits. Quality content creation is key in this form of marketing.

Content creation is the process of planning, researching, producing and sharing engaging material like text, audio, or video to inform, entertain, or inspire a target audience in order to create brand awareness, establish trust, and achieve marketing objectives. It requires creating and making available valuable information for a target audience. Content creation has emerged as a cornerstone of economic growth, identity construction, and professional sustainability for digital creators (Mou & Faruk, 2024). These content creators are turning ideas into a digital content (The University of Jordan, 2024), using platforms like blog posts, social media updates, videos, websites and podcasts.

The importance of content creation in digital marketing cannot be overemphasize. Martin (2024) averred that content creation in digital marketing helps in building brand identity, engaging audiences, and driving traffic and conversions. By extension, effective content creation enables and reinforce brand identity by communicating values to the audience through consistent messaging and visual storytelling. When the content is of high quality, it will encourage audience interaction and foster online community. Martin further stressed that engaged audiences are more likely to share content, enhancing visibility and reach. By giving proper attention to and in addressing the needs and interests of audience in content, it can lead to higher conversion rates thereby drawing traffic and conversion to the content. Furthermore, content quality and quantity are paramount for audience engagement, brand differentiation, and search engine optimization (SEO). To timely meet-up with content quality and quantity increasing demand, most marketers have resolved to scalable solutions, making Generative Artificial Intelligence (GenAI) tools particularly attractive.

GenAI refers to any machine learning model that is capable of creating output like text, images, audio, video, drug discovery, music composition, medical diagnostics among others based on patterns from its training data. Singh (2024) asserted that GenAI tools are an emerging class of new-age artificial intelligence algorithms capable of producing novel content in varied formats such as text, audio, video, pictures, and code based on user prompts. GenAI is applied in various fields including business. Mustaqeem (2025) claimed that many businesses, about 68% of those sampled are employing GenAI tools, most commonly for automated content generation, personalized campaigns, and customer engagement. This according to Sharma and Dwivedi (2025) improves operational output of businesses.

The emergence of GenAI tools in recent years has transformed the way digital marketing operates, particularly in the arena of content creation. Marketers now leverage AI-powered platforms to automate and enhance a wide range of creative tasks, from generating copy and visuals to editing videos and designing data-driven storytelling experiences. This assertion is strengthen by Li et al. (2025) with emphasis that GenAI has enable scriptwriting, visual and audio generation, editing, and even the curation of data-driven narratives. El Erafy (2023) amplified two significant aspects where AI has made considerable strides to be automated writing and scriptwriting, each contributing to the efficiency and creativity of content generation. AI-driven automated writing tools offer a valuable resource for generating diverse and high-quality content at scale. Its role in scriptwriting offers content creators a tool that combines the richness of human imagination with the analytical power of machine intelligence, thereby reshaping storytelling in marketing landscape.

The integration of GenAI into digital marketing workflows promises to streamline production, lower costs, and democratize access to high-quality content. The reason for this



as given by Kanezaki (2024) is that GenAI possesses the agility in content production, precision in personalization, and the democratization of advanced marketing strategies, even for small businesses and has the ability to personalize messages and adapt to different audiences and niches. Furthermore, Wu et al (2025) perceived GenAI as a key driver of innovation and productivity as it has increasingly been applied in the field of digital media design and creation. The application of AI is followed by the deployment of numerous critical phases of the marketing process, such as customer profiling, market segmentation, personalization of the user experience, and performance analysis of advertising campaigns (Mani, 2024). The integration of GenAI tools further facilitates the automation of repetitive tasks like email marketing and social media management, liberating time for strategic thinking and creative pursuits (Jadhav, 2024). More so, it help businesses in predicting consumer behaviour, customizing advertisements, and optimizing website content for enhanced search engine visibility; enabling companies to connect with the right audience in real-time through personalized product recommendations and dynamic content creation (Šidanski, 2024)

There are various GenAI tools businesses can leverage on to enhance their online operations. Specifically, Anderson and Niu (2025) noted that platforms like ChatGPT, MidJourney, and Leonardo.AI have rapidly gained traction among content creators on social media and video-sharing platforms, such as YouTube, due to their ability to create diverse forms of digital content and reduce the labour associated with creative production. These tools promise not only to accelerate content production but also to enable mass customization and experimentation that would be infeasible using manual methods alone. In a study that employed content analysis on seven selected AIGen-tools, Malakar and Leeladharan (2024) found that Grammarly Business led with a score of (76), followed by Scalnut (75), Writesonic (53), ProWritingAid (51), Jasper (48), TextCortex AI (38), and Rytr (36). For the purpose of this study proper attention is focused on Chat Generative Pre-trained Transformer (ChatGPT) and Grammarly to empirically establish how there can effectively impact on digital marketing content creation.

Chat Generative Pre-trained Transformer (ChatGPT) is a GenAI tool with the ability to answer specific questions and provide an expert explanation on a topic or factual answers, without users having to scroll through dozens of responses. Raghavaiah and Srikanth (2024) stated that ChatGPT is a revolutionary invention that has made content generation accessible and provide only the most relevant documents with sum-up information, which looks like a subject expert or a colleague offers it. ChatGPT is able to produce targeted, relevant, and engaging messages, using elements such as appropriate tone, accessible language, and formats adjusted to the digital platforms most used by each audience (Kanezaki et al., 2024). By leveraging ChatGPT, marketers can enhance the efficiency and quality of content generation, resulting in more engaging and personalized communications (Bindu, 2024).

Researches have indicated the efficacy of ChatGPT in digital marketing. Nyuhuan (2023) revealed that ChatGPT promotes strategic innovation and optimization in marketing plan development through data-driven insights and creative suggestions and can automatically generate high-quality content that meet the standards of SEO, reducing the burden on marketing teams. ChatGPT can also automates purchaser care and boosts engagement in virtual marketing and can offers personalized stories to clients (Vijai & Elayaraja, 2024).



Grammarly is another GenAI tool covered in the study. Grammarly was developed and launched in 2009 by Ukrainian engineers, Maz Lytvyn and Alex Shevchenko (Cavaleri & Dinati, 2016). It is an AI-powered writing assistant which offers real-time suggestions and corrections for various writing aspects. Musyarofah et al. (2025) maintained that Grammarly offers instant feedback on grammar, sentence structure, and vocabulary, enabling students to revise and enhance their writing more effectively. Treanor (2024) described Grammarly as a notably market leader in provide spelling and grammar correction, tips on writing clear sentences, paraphrasing and summarizing functions.

Grammarly significantly impacts digital marketing content creation by enhancing efficiency, quality, and consistency, and enabling content creators to better tailor their message to their audience. Grammarly help users to create profession content that convey precise and clear message to audience. In buttress, Zaylobidinova (2021) noted that Grammarly refine has writing by offering automated grammar checking tool with immediate feedbacks to help writers see errors and correct them at the same time. There are literature evidence to support the increasing adoption of GenAI tools in domains such as social media, video production, and storytelling. However, there remains a significant gap in understanding their effectiveness, particularly within the context of digital marketing content creation. Therefore, there is a need for more research particularly on the relationship in the effectiveness of GenAI tools and digital marketing content creation among business educators in Cross River State.

### **Statement of the Problem**

Digital marketing content creation has become a central driver of audience engagement, brand visibility, and competitive advantage in today's digitally mediated economy. With the rapid advancement of generative artificial intelligence (GenAI) tools, digital marketing content creation processes are increasingly automated and enhanced. These tools promise improved creative efficiency, reduced production costs, faster turnaround times, and expanded access to sophisticated content production capabilities for marketers and educators alike.

Despite this growing reliance on GenAI tools, there remains limited empirical evidence on their actual effectiveness in enhancing digital marketing content creation, particularly in educational and professional contexts. Most existing studies have largely focused on the technical functionalities and general use cases of GenAI technologies, with insufficient attention paid to how effectively these tools support the quality, consistency, creativity, and strategic relevance of digital marketing content. As a result, stakeholders including business educators responsible for training future marketers lack clear, evidence-based guidance on whether GenAI tools meaningfully improve digital marketing content creation outcomes or merely accelerate existing inefficiencies.

This knowledge gap is especially problematic in the context of rapidly evolving digital marketing environments, where content performance is measured by indicators such as engagement rates, brand storytelling effectiveness, audience relevance, and production efficiency. The absence of robust analytical frameworks and context-specific evaluations makes it difficult to determine the extent to which GenAI tools contribute to these outcomes, particularly within developing digital ecosystems. Against this backdrop, there is a compelling need to empirically examine the relationship between the effectiveness of GenAI tools and digital marketing content creation among business educators in Cross River State.



### **Purpose of the Study**

The main purpose of the study was to assess the relationship in the effectiveness of GenAI tools and digital marketing content creation among business educators in Cross River State. Specifically, the study determined the relationship between:

1. ChatGPT and digital marketing content creation
2. Grammarly and digital marketing content creation

### **Research Questions**

The study was guided by the following research questions:

1. What is the relationship between ChatGPT and digital marketing content creation?
2. What is the relationship between Grammarly and digital marketing content creation?

### **Hypotheses**

The following null hypotheses guided the study:

1. There is no significant relationship between the ChatGPT and digital marketing content creation.
3. There is no significant relationship between Grammarly and digital marketing content creation.

### **METHODOLOGY**

Correlational research design was adopted for the study. The population comprised 95 business educators in four tertiary institutions offering business education programme in Cross River State. Census sampling technique was adopted since the population is small. Data was collected with the help of two separate instruments. Generative Artificial Intelligence Tools Rating Scale (GAITRS) was used to elicit information on GenAI tools and was divided into two clusters of 10 item each covering ChatGPT and Grammarly. Digital Marketing Content Creation Scale (DMCCS) which contains 10 items was used to elicit information on digital marketing content creation. Both instruments were validated by experts. A trial test was conducted on 20 respondents. Data collected were tested for reliability using Cronbach reliability coefficient to determine their internal consistency. Results obtained were as follows: GAITRS, cluster 1 (0.86); cluster 2 (0.87). Its overall reliability result was 0.89. DMCCS yielded 0.96. A total 87 copies of the instruments out of 95 administered were completed and successfully returned. Data was analysed using linear regression in SPSS.



**Results**

**Table 1: The Index of Relationship between the effectiveness of Chatgpt and Digital Marketing Content Creation**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |
| 1     | .608 <sup>a</sup> | .370     | .362              | 12.30433                   | .370              | 49.897   | 1   | 85  | .000          |

a. Predictors: (Constant), ChatGPT

Table 1 shows that the regression analysis produced a coefficient of  $r = 0.608$ , indicating a strong positive relationship between the ChatGPT and digital marketing content creation. This implies that higher ChatGPT is associated with improved digital marketing content creation. Furthermore, the coefficient of determination ( $r^2 = 0.370$ ) indicates that approximately 37% of the variance in digital marketing content creation is explained by the ChatGPT, while the remaining 63% is attributable to other factors not included in the model.

**Table 2: The Index of Relationship between the effectiveness of Grammarly and Digital Marketing Content Creation**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |
| 1     | .555 <sup>a</sup> | .308     | .300              | 12.89348                   | .308              | 37.851   | 1   | 85  | .000          |

a. Predictors: (Constant), Grammarly

Table 2 reveals that the regression analysis produced a coefficient of  $r = 0.555$ , indicating a strong positive relationship between the Grammarly and digital marketing content creation. This implies that higher Grammarly is associated with improved digital marketing content creation. Furthermore, the coefficient of determination ( $r^2 = 0.308$ ) indicates that approximately 31% of the variance in digital marketing content creation is explained by the Grammarly, while the remaining 63% is attributable to other factors not included in the model.

**Table 3: Test of Significance of Relationship between the effectiveness of ChatGPT and digital marketing content creation**

| Model | Unstandardized Coefficients |            | Standardized Coefficients | t    | Sig.  | 95.0% Confidence Interval for B |             | Correlations |         |      |      |
|-------|-----------------------------|------------|---------------------------|------|-------|---------------------------------|-------------|--------------|---------|------|------|
|       | B                           | Std. Error | Beta                      |      |       | Lower Bound                     | Upper Bound | Zero-order   | Partial | Part |      |
| 1     | (Constant)                  | 33.062     | 5.804                     |      | 5.696 | .000                            | 21.522      | 44.602       |         |      |      |
|       | ChatGPT                     | .607       | .086                      | .608 | 7.064 | .000                            | .436        | .777         | .608    | .608 | .608 |

a. Dependent Variable: DMCC

Table 3 indicates that the alpha level (0.05) is greater than the significance of t (0.000). The researcher rejects the null hypothesis and concludes that the relationship between ChatGPT



and digital marketing content creation is statistically significant. Therefore, there is a significant relationship between the ChatGPT and digital marketing content creation.

**Table 4: Test of Significance of Relationship between the effectiveness of Grammarly and Digital Marketing Content Creation**

| Model        | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. | 95.0% Confidence Interval for B |             | Correlations |         |      |
|--------------|-----------------------------|------------|---------------------------|-------|------|---------------------------------|-------------|--------------|---------|------|
|              | B                           | Std. Error | Beta                      |       |      | Lower Bound                     | Upper Bound | Zero-order   | Partial | Part |
| 1 (Constant) | 31.271                      | 6.920      |                           | 4.519 | .000 | 17.511                          | 45.030      |              |         |      |
| Grammarly    | .630                        | .102       | .555                      | 6.152 | .000 | .426                            | .834        | .555         | .555    | .555 |

a. Dependent Variable: DMCC

Table 4 indicates that the alpha level (0.05) is greater than the significance of t (0.000). Furthermore, the calculated-t value of 6.15 is greater than the critical-t value 0.99. The researcher rejects the null hypothesis and concludes that the relationship between the effectiveness of Grammarly and digital marketing content creation is statistically significant. Therefore, there is a significant relationship between the effectiveness of Grammarly and digital marketing content creation.

**Discussion**

Findings indicated a high positive relationship between the effectiveness of ChatGPT and digital marketing content creation. With ChatGPT effectively contributing 37% to digital marketing content creation. The findings suggests that ChatGPT is effective in quick and efficient creation of personalized campaigns and advertising materials which are relevant in digital marketing. This aligns with Kanazaki et al. (2024) that the campaigns created by ChatGPT demonstrate how it can help overcome recurring challenges in retail, such as the limitation of time and resources to create quality content. Not only that ChatGPT can create personalized content, Bushell (2023) posited that ChatGPT has influenced and transformed the field of marketing, including customer engagement, content creation, personalization, and ethical considerations. ChatGPT understands the type of content to generate that is of interest to potential and existing customers. This assertion is confirmed by Aldous et al. (2024) that ChatGPT-4 comprehends what type of content to create for different platforms, making it a useful tool for cross-platform content creation.

Further findings indicated that there is a significant relationship between the effectiveness of ChatGPT and digital marketing content creation. This suggests that ChatGPT has the potential to impact positively on digital marketing. ChatGPT can produce creative and interesting advertising campaigns that attract targeted potential buyers or consumers' attention. The findings aligns with Saputra et al. (2023) that marketing content created using AI Chat GPT can achieve high levels of attention and engagement among users, increasing their interest in the products or services offered by the company.

Data analysis revealed a high positive relationship between the effectiveness of Grammarly and digital marketing content creation. The findings indicates that Grammarly can effectively contribute 31% to digital marketing content creation. Grammarly is notable in assisting writing to give a professional looking documents. Grammarly offers real-time



suggestions and corrections for various writing aspects. The finding agrees with Musyarofah et al. (2025) that Grammarly offers instant feedback on grammar, sentence structure, and vocabulary, enabling students to revise and enhance their writing more effectively. The finding further aligns with Treanor (2024) that Grammarly is a notably market leader in provide spelling and grammar correction, tips on writing clear sentences, paraphrasing and summarizing functions. Grammarly also has features to enhance proofreading of content and detect and guide against plagiarism.

Further analysis revealed that there is a significant relationship between the effectiveness of Grammarly and digital marketing content creation. By extension, Grammarly is a useful tool for efficient generating of content in a precise way. The finding is in line with the Grammarly Partner Programme (2024) that Grammarly enable businesses to guide audience in real-time with critical business information and brand voice suggestions to align workplace messaging. Grammarly is increasingly becoming indispensable in content generation Alaa (2025) agrees that Grammarly has become invaluable for analysing the readability of content and suggesting improvements.

## **CONCLUSION**

Generative AI tools have fundamentally reshaped digital marketing content creation, offering unprecedented efficiencies in ideation, production, paragraphing, editing, proofreading, and distribution. Empirical evidence suggests that GenAI tools particularly ChatGPT and Grammarly are significant in their relationship to digital marketing content creation. They demonstrates high positive relationship and can contribute effectively to digital marketing content creation, attract the interest and engagement of customers. ChatGPT and Grammarly demonstrated their effectiveness in streamlining workflows, enhancing creative output, and democratizing access to sophisticated media production capabilities. However, realizing their full potential requires careful integration into human-AI collaboration frameworks, vigilant oversight to ensure quality and authenticity, and proactive attention to sustainability and ethical considerations. As GenAI technologies continue to evolve, marketers must remain agile, adopting best practices that balance automation with human creativity and responsibility. The future of digital marketing content creation will depend not only on the sophistication of AI tools but also on the wisdom with which they are deployed.

## **Recommendation**

The study recommends that:

1. Business educators should adopt best practices that balance automation with human creativity and responsibility in the use of GenAI in digital marketing content creation.
2. Business educators should exhibit vigilant oversight to ensure quality and authenticity in the application of GenAI in content creation.

## **Implication of the study**

The implication of the study is that in digital marketing landscape, GenAI tools can handle more of the content creation process. Businesses can improve their marketing effectiveness by using GenAI tools like ChatGPT and Grammarly to efficiently create attractive and engaging contents. However, automation of complex creative tasks like digital content creation may demand new skill gaps. Business educators and marketers must be



prepared to develop new competencies including prompt engineering, AI oversight, and critical evaluation of AI outputs to remain relevant and competitive.

## References

- Adie, F. U., Olom, P., & Ingwe, M. O. (2025). Digital marketing skills needed by business education students in public tertiary institutions in cross river state for business success upon graduation. *International Journal of Business and Entrepreneurship Education*, 2(1), 12-20.
- Alaa, M. (2025). *Using grammarly in marketing content creation: enhancing copy precision*. <https://profiletree.com/grammarly-content/>
- Aldous, K., Salminen, J., Farooq, A., Jung, S-G., & Jansen, B. J. (2024). Using chatgpt in content marketing: enhancing users' social media engagement in cross-platform content creation through generative ai. In *35th ACM Conference on Hypertext and Social Media (HT '24)*, September 10–13, 2024, Poznan, Poland. <https://doi.org/10.1145/3648188.3675142>
- Anderson, T., & Niu, S. (2025). Making ai-enhanced videos: analyzing generative ai use cases in YouTube content creation. In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '25)*, April 26-May 1, 2025, Yokohama, Japan. ACM. <https://arxiv.org/pdf/2503.03134v1>
- Bindu N. (2024). Harnessing chatgpt in digital marketing: transforming content creation, customer interaction, email marketing, social media management, and data analytics (review). *A Monthly, Peer Reviewed & Referred Journal*, 13 (9), 16,826-16831. DOI: 10.15680/IJRSET.2024.1309115
- Bushell, C. (2023). *Impacts of chatgpt on marketers: A comprehensive analysis*. <https://ssrn.com/abstract=4556646>
- Cavaleri, M., & Dianati, S. (2016). *You want me to check your grammar again? The usefulness of an online grammar checker as perceived by students*. <http://www.journal.aall.org.au/index.php/jall/article/view/393>.
- El Erafy, A. N. (2023) Applications of Artificial Intelligence in the field of media. *International Journal Of Artificial Intelligence And Emerging Technology*, 2 (2), 19 – 41.
- Grammarly Partner Programme (2024). *Why partner with grammarly*. [https://assets.ctfassets.net/1e6ajr2k4140/1fp32jEMvpAtaTe0vhwEgf/ea0b82cc99fd18f0dc3bf3be7c2eef68/Partner\\_Brochure\\_\\_1\\_.pdf](https://assets.ctfassets.net/1e6ajr2k4140/1fp32jEMvpAtaTe0vhwEgf/ea0b82cc99fd18f0dc3bf3be7c2eef68/Partner_Brochure__1_.pdf)
- Jadhav, S. B. (2024). The influence of artificial intelligence on the digital marketing landscape. *International Journal of Novel Research and Development*, 9 (1), 167-174.
- Kanezaki, P. D., Oliveira, R. D. & Canella, V. B. (2024). Digital marketing: contributions of artificial intelligence in the creation of personalized strategic content. *Revista Aracê, São José dos Pinhais*, 6 (4), 15621-15659.
- Kumari, N. (2024). A study on digital marketing and its components. *International Journal for Multidisciplinary Research*, 6 (2), 1-4.
- Li, H., Wang, Y., & Qu, H. (2025). Reflection on data storytelling tools in the generative ai era from the human-ai collaboration perspective. *Proceedings of the Institute of Electrical and Electronics Engineers (IEEE) Visualization Conference*, October 27-30, 2025. <https://arxiv.org/pdf/2503.02631v2>



- Malakar, P., & Leeladharan, M. (2024). Generative AI Tools for Collaborative Content Creation: A Comparative Analysis. *Journal of Library & Information Technology*, 44 (3), 151-157. DOI: 10.14429/djlit.44.03.19698
- Mani, A. (2024). Applying artificial intelligence to the digital marketing: Opportunities and challenges for the marketer. *International Journal of Business and Management Review*, 12 (2), 56-74
- Martin, D. (2024) Content creation: Strategies for engaging and impactful media. *Global Media Journal*, 22 (69), e441.
- Mou, A. J., & Faruk, M. I. (2024). Content creation as a growth strategy: Evaluating the economic impact of freelance digital branding. *American Journal of Scholarly Research and Innovation*, 3 (2), 28–51. <https://doi.org/10.63125/mj667y36>
- Mustaqeem, A. M. (2025). The impact of generative ai on digital marketing strategies: evidence from emerging markets. *International Journal of Research and Scientific Innovation*, 12 (5), 851-861. DOI: 10.51244/IJRSI
- Musyarofah, R., Hamid, A. I. R., & Halim, A. (2025). Grammarly as a digital learning tool: supporting self-directed learning in academic writing at Universitas Muhammadiyah Kalimantan Timur. *Borneo Educational Journal*, 7 (2), 355-366.
- Nyuhuan, G. (2023). Study on the innovative application of chat gpt in digital marketing. *International Journal of Novel Research in Electrical and Mechanical Engineering* 11 (1), 47-52.
- Raghavaiah, P., & Srikanth, K. (2024). Study of chatgpt influence on academic world for learning and research activities. *International Journal of Information Studies*, 16 (1), 1-8. <https://doi.org/10.6025/ijis/2024/16/1/1-8>
- Saputra, R., Nasution, M. I. P., & Dharma, B. (2023). The impact of using ai chat gpt on marketing effectiveness: A case study on instagram marketing. *Indonesian Journal of Economics and Management*, 3(3), 603-617.
- Sharma, A., & Dwivedi, N. (2025). Generative AI in business content creation: a strategic shift in marketing and communication. *International Journal of Research Publication and Reviews*, 6 (6), 9406-9418
- Šidanski, J. (2024). *Artificial intelligence in the function of content creation in digital marketing*. DOI: 10.46541/978-86-7233-428-9\_376
- Singh, K. (2024). Principles of generative ai a technical introduction. <https://www.cmu.edu/intelligentbusiness/expertise/genai-principles.pdf>
- The University of Jordan (2024). *Digital content creation*. [https://doctor2024.jumedicine.com/wp-content/uploads/sites/16/2024/09/MDS\\_Chapter5pdf.pdf](https://doctor2024.jumedicine.com/wp-content/uploads/sites/16/2024/09/MDS_Chapter5pdf.pdf)
- Treanor, Fergal Enda (2024). *Rewriting history: the impact of digital writing assistants on student agency*. Available at or <http://dx.doi.org/10.2139/ssrn.5042736>
- Vijai, C., & Elayaraja, M. (2024). The impact of chat gpt on digital marketing. *Pacific Business Review (International)* 16 (8), 29-34.
- Wu, Fan, Zhu, S., Zou, J. (2025). Exploring the application of ai in digital media design and creation. *Journal of Artificial Intelligence Practice*, 8 (1), 33-36.
- Zaylobidinova, M. G. (2021). Grammarly-technological tool for enhancing writing skills. *Modern Language Journal*, 4 (17), 15-17.