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Artificial Intelligence in Design and Impact on Electronic Marketing in Companies

Ali Mohammad Ali Alqudah[1], Yousef M. Jaradat[2], Basim Abbas Ali AlObaydi[3], Derar Alqudah[4], Emran (Mohamad Ali) Abdalah Al Qudah[5], Baker Akram Falah Jarah[6]

Abstract

E-marketing refers to the use of technology and artificial intelligence to analyze and interpret marketing data. In addition to providing recommendations and guidance to improve marketing campaigns, improve user experience, and increase sales. These tools include data analytics, machine learning, data classification and aggregation, voice and image recognition, and natural language. Therefore, this study aimed to identify the effect of artificial intelligence (AI) in Design on E-Marketing in Companies. This study used a survey design with a quantitative approach, with the target group being workers of E-Marketing companies. A 198 surveys were also gathered from Jordanian E-Marketing companies, however, 187 questionnaires were judged viable for study. Where the results indicate AI positively affects E-Marketing, and natural language processing, analytical models, content marketing, and digital marketing affect E-Marketing.

Keywords: *Artificial intelligence; natural language processing; analytical models; content marketing; digital marketing and e-marketing.*

Introduction

AI is a strategy for making the most use of technology and market data to improve the customer experience (Alwreikat & Aliqteshat, 2024). AI is revolutionizing the marketing environment and will soon completely change it. Even though marketing is one of the most significant business applications of AI today, early adopters are working to extract value from it (Shaik, 2023). Therefore, AI is applied in a wide range of business activities across several functional areas and operations, one of them being marketing, which is considered the core of the firm (Alsmadi et al., 2023). Nowadays, AI is regarded as one of the most crucial of these technologies. It might help to better prepare the marketing plan and improve the consumer experience. It also allows marketers to do their jobs better (Shakhatreh et al., 2022). Furthermore, AI might do a better job than humans in preparing marketing plans (Paschen et al., 2019). Previously, E-marketing was viewed as a supplement to traditional marketing methods on which businesses could or could not rely. Similarly, firms may now choose whether or not to rely on AI (Benhmad et al., 2024). However, it will soon be vital to boost business and profitability for organizations that employ e-marketing. As a result, firms must strive to rely on AI and develop the necessary mechanisms to better E-marketing duties (Grewal et al., 2020). In the future, AI looks to affect marketing strategies such as company models, sales procedures, and client service alternatives, as well as client behaviors (Alazzam et al., 2024). Many sectors are becoming increasingly reliant on AI, and with quick progress demonstrating its efficacy, it will soon become necessary to utilize (AlZu'bi et al., 2019). Where the E-marketing is one of the industries into which artificial intelligence has begun to expand. It is predicted to make a significant contribution to upgrading e-marketing techniques, making them more successful and lucrative (Davenport et al., 2020). However, AI provides sophisticated technology that can replicate and even outperform the human factor. They have the potential to make significant contributions to the transformation of E-marketing. AI technology has the potential to greatly boost revenues for large, medium, and small businesses. Without question, developing a good marketing plan is the foundation for success (Almaiah et al., 2022). It has been observed that many e-marketing organizations are unable to develop an effective marketing strategy for their Internet business, that is despite the availability of technology that may help these organizations successfully prepare

[1] Assistant professor A, Al-zaytoonah university of Jordan, Faculty of architecture and design. Email: a.qudah@zuj.edu.jo, Orcid: 0000-0003-1172-340x.
[2] Electrical Engineering, Faculty of Engineering and Technology. Email: y.jaradat@zuj.edu.jo
[3] Associate Professor, Al-Zaytoonah University of Jordan, Graphic design Department, Faculty of Architecture and design.Email: b.alobaydi@zuj.edu.jo, Orcid: 0000-0001-5851-3851.
[4] Assistant Professor, Applied Science Private University, Department of Visual Communication Design, Faculty of Art and Design. Email: D_qudah@asu.edu.jo, Orcid: 0000-0002-7875-6583.
[5] School of Creative Media – SAE, Luminus Technical University College, Jordan. Email: e.alqudah@saejordan.com, Orcid: 0000-0002-4598-8898.
[6] Faculty of Business, Amman Arab University, Amman Jordan, 11953. Email: dr.baker@aau.edu.jo, https://orcid.org/0000-0001-5257-0118.

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marketing plans and become more efficient (Fayed, 2021). With a shift in communication and integration strategies, traditional marketing has evolved into non-conventional marketing through the use of AI (Almatarneh et al., 2023). This trend has resulted in changes in the marketing industry, AI is a critical component of many industries, including marketing, AI transformed how we utilize data to make critical marketing decisions and improve the client experience (Thiraviyam, 2018; Qinghua & Tao, 2024).

As a result, many e-marketing organizations struggle to develop an effective marketing strategy that is consistent with selling their products electronically. This eventually leads to marketing failure and exclusion from the competition. These businesses should look for the tools they need to create a successful marketing strategy that is appropriate for their online activities. AI is a novel and crucial method for creating and improving firms' operations in all aspects. The most crucial of them is creating a marketing plan that is appropriate for e-marketing. Companies should profit from this significant technological advancement by upgrading and developing marketing strategy preparation. It should be highlighted that most e-marketing organizations have yet to rely on it in general while expanding their online businesses, particularly when formulating marketing plans. They use it for very specific purposes, such as instant messaging. These businesses are still unaware that by leveraging the current AI technology, they may develop a successful marketing strategy. As a result, this study adds to our knowledge of the use of AI in e-marketing by outlining a systematic framework for AI that makes use of the joint intelligence of AI, marketers, and consumers, as well as the consumer's viewpoints.

Literature Review

In a continually expanding civilization and an ever-changing globe, where there is a wealth of knowledge and products, the sale and consumption of commodities is an essential element of the majority of the world's residents' daily routines (Al Zobi & Jarah, 2023). People make decisions and choices about what things to consume based on the demands they desire to meet. As a result, it is critical to examine consumer motives and sentiments that drive reception-specific decisions regarding the products or services they consume regularly (Papadopoulos et al., 2018). Furthermore, the use of information technology in businesses promotes customer relationship management, which contributes to increased customer satisfaction, while new intelligent manufacturing capabilities are transforming the company-customer relationship from one focused on products to one focused on creating value and services, including personalization (Stăncioiu et al., 2023). AI is also rapidly acquiring popularity and importance in the larger marketing area. Many marketing roles have put AI applications into training, such as robots for customer greeting, big data analytics for price adjustment and prediction, recommender methods for product and promotional personalization, crude language processing for client engagement and in-store background optimization for customer satisfaction tracking (Huang & Rust, 2022).

Technology is critical in guiding marketing policies and creating plans for agencies and organizations (Jarah et al., 2023). AI enables businesses to acquire and track exact real-time client data, which they may then use to design unique marketing strategies (Krishna et al., 2023). Marketing refers to any tactics that can have a significant impact on individuals at a certain time, in a specified area, and via a specific channel (Abunasser et al., 2023). As a result, most businesses and commercial organizations began selling their products online after sensing consumer or customer interest in E-marketing (Hailat, 2023). AI is a critical tool for making the many forms of data acquired from various digital points of sale, whether sorted or unordered, comprehensible and rational in context. This is to swiftly execute marketing choices, give personalized customer care, and streamline marketing activities, giving you an advantage over rivals. AI is viewed as a revolution in e-marketing (Shaik, 2023). Therefore, it's important to emphasize AI's role in enhancing marketing choices and boosting productivity, support scientific research, set up a department dedicated to utilizing AI to activate E-marketing in companies and use AI applications in marketing services to enhance customer experience within the context of the global trend (Khalifa et al., 2023). Enterprises may now employ data, forecasting models, and sophisticated algorithms to optimize marketing strategies and tailor campaigns to the specific demands of each potential client (Ward et al., 2023).

As a result, AI technologies are rapidly being applied in the sphere of digital marketing in today's technology era (Arshad et al., 2023). The rapid development of technology has had a significant impact on human life. New technologies are being applied in many fields (Ababneh et al., 2024). AI is a contemporary science that seeks to construct machines that mimic human intellect. Its applications include banking, robotics,

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healthcare, and marketing (Sadeq et al., 2023). Where the organizational processes have changed due to disruptive technologies like AI, big data analytics, blockchain, and the Internet of Things. AI is the most recent disruptive technology, with enormous promise for the marketing revolution. Practitioners worldwide are looking for the best AI solutions for their marketing tasks. E-marketing is an absolute need since it allows the firm to generate large earnings (Verma et al., 2021). These applications, characterized by diversity and continual innovation, have lately enhanced e-marketing organizations' global market competitiveness. Nowadays, the rise in internet user's forces organizations to rely increasingly on E-marketing (also known as e-marketing) to assist their marketing efforts (Aghion et al., 2019).

To increase their chances of success, define AI as computerized systems that collect data and do tasks often performed by intelligent humans (Jarah et al., 2024). Strong AI is a machine that has consciousness, and a mind and is intelligent in a variety of fields (Carracedo et al., 2023). AI remembers all previous customer encounters, including when, where, and how, to systematize consumer needs, interests, and behavior. Researchers have proved the influence of AI on internet marketing. AI converts data into intelligent information, allowing retailers to leverage social media as an advertising tool (Saeed Bazuhair, 2022). Therefore, AI tools are among the most important tools companies use to improve their online shopping experience and increase their sales (Jawad et al., 2024). Modern technologies such as data analysis are used to determine consumer behaviors and personal product recommendations to them, as marketing and sales have been greatly influenced by developments in information technology (Abdulridha & Reshak, 2023). AI technologies such as machine learning, neural networks, and AI bots can help improve user experience and increase the efficiency of core operations in e-commerce. AI can be used to analyze data, make forecasts and recommendations for customers, improve marketing operations, manage inventory, and improve the logistics and shipping system (Zhang et al., 2021). Aghion et al. (2019) found that robotization decreases employment at the employment zone level and has a greater negative impact on non-educated workers than on educated people. Furthermore, the study indicates that ineffective labor market and education policies decrease the good influence that AI and automation might have on employment.

Furthermore, the introduction of AI has altered the dynamics of the commercial sector. AI has a substantial impact on marketing success and is expected to continue to expand in the next years (Vlačić et al., 2021). AI has improved the performance of marketing in a variety of ways, AI is predicted to have a greater effect shortly. Robots will replace salesmen, and websites will be automatically updated and reformatted based on eye-tracking data (Almajali et al., 2023). The area of marketing is and will continue to change fast as AI evolves and advances. Furthermore, the employment of AI in digital marketing strategy through social media platforms may be extremely beneficial to marketers, allowing for the development of personal information and its subsequent use in successful campaigns (Basheer, 2024). AI is the solution to this challenge, with an emphasis on using customer data and machine learning in marketing strategies to anticipate consumers' next steps and improve their experience through content personalization (Ardash et al., 2022). E-marketing can be referred to as online marketing or internet marketing. It involves the exchange of products and services over the Internet and other media. E-marketing is vital for organizations for several reasons, including the ability to discover and target potential clients online and engage with the audience more efficiently (Sadeq et al., 2023). Fayed, (2021) study validates and theoretically establishes that AI makes a substantial contribution to formulating marketing plans by analyzing the environment, and rivals' methods, and setting marketing goals. Furthermore, AI helps to prepare the budget and appreciate the marketing plan, as well as to evaluate and regulate it. According to the report, AI can help with analyzing and selecting target markets and sectors, as well as targeting clients and developing appropriate marketing mix tactics for each sector.

In the age of AI, Big Data, and the Internet of Things, marketing decisions are more driven by current technology, while also influencing and shaping consumer online experiences (Mahany, 2022). Marketing is the key business function with the greatest AI applications now (Chan et al., 2022). Additionally, AI is a rapidly emerging field. It is the most current technological disruptor with massive marketing conversion potential. Experts from all around the world are working hard to identify the finest AI solutions for their marketing divisions. The world is rapidly shifting to a digital era, as is widely understood. Smart-marketing organizations that apply AI technology in their marketing activities confirm the increased utilization of digital content (Chandra et al., 2023). Dharmaputra et al. (2021) found that the perceived ease of use of AI substantially and positively influenced customers' convenience and cost reduction as e-marketing results.

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The perceived utility of AI has a considerable and favorable impact on customers' convenience and cost reduction. A favorable and substantial association was discovered between consumer convenience and cost reduction.

As a result, AI and e-marketing are systems that use client data to predict the customer's next step and improve the client journey (Huang & Rust, 2021). AI bridges the gap between data collection and execution by sifting through and analyzing large amounts of data, which was previously an insurmountable task. Marketing and sales are at the forefront of AI innovation, driven by the need for increased efficiency daily. Companies who strongly believe in inbound leads and inbound marketing methods feel that customer data may assist them in understanding consumer behavior (Sumitha, 2022). Sadeq et al. (2023) found that AI applications had a statistically significant influence on e-marking and its competitive advantage. According to Khalifa et al. (2023), the actuality of employing AI was reached to a large extent in the E-marketing of the website. Hassan (2021) said that AI systems derived from social computing technology may be used to comprehend social networks on the Internet. Ghaith et al. (2023) found an influence of AI on marketing performance. The research advised that managers encourage the use of AI technologies, which aid and expedite the completion of client services, because the use of these technologies' boosts customer satisfaction with bank performance. Shaik, (2023) research discusses the impacts of AI integration in marketing, the benefits and drawbacks of AI integration in marketing, as well as your company's before and post-AI marketing strategy, ethical issues, and the employment of AI in the marketing business. Sumitha, (2022) discovered that AI is an unavoidable component of the future marketing and sales environment. According to Mahany, (2022) research, consumers' high degree of understanding of technological applications in e-marketing adds to their increased awareness of privacy issues. Furthermore, the more people are exposed to e-marketing, the less they value their digital privacy. Furthermore, as people have a better understanding of how current technology might be used in e-marketing, their desire to preserve their digital privacy grows. Also, Jebril et al. (2023) discovered that both strategic intelligence and asset management have a favorable influence on boosting competitive advantage when cybersecurity plays a mediating role.

In addition, based on the literature review, the study model was developed as shown in Figure 1, also five hypotheses were developed as follows:

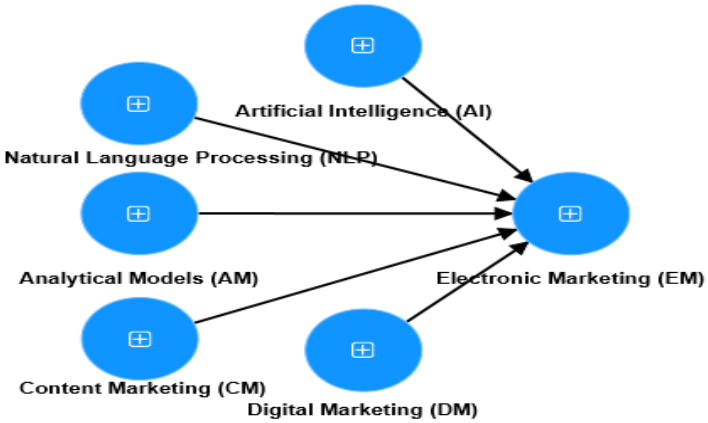

Figure 1. Research model.

H1: Artificial Intelligence (AI) passively effect Electronic Marketing (EM).

H2: Natural Language Processing (NLP) passively effect Electronic Marketing (EM).

H3: Analytical Models (AM) passively effect Electronic Marketing (EM).

H4: Content Marketing (CM) passively effect Electronic Marketing (EM).

H5: Digital Marketing (DM) passively effect Electronic Marketing (EM).

Methodology

This study used a survey design with a quantitative approach, with the target group being workers of e-marketing companies. 198 surveys were also gathered from Jordanian e-marketing companies, however,

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187 questionnaires were judged viable for study. To capture the opinions of the selected sample, the questionnaire was used as a technique of data collection. In addition, the management of e-marketing companies gave verbal clearance to disseminate the questionnaire to its personnel. Also, informed consent was obtained from all participants included in the study. Participants were provided with detailed information about the study's objectives, procedures, potential risks, and benefits, and their consent was obtained before their involvement in this study. Also, the management of e-marketing companies gave the authors verbal clearance to disseminate the questionnaire to their personnel. It also addresses how participant confidentiality and anonymity were maintained throughout the study, including data collection, analysis, and reporting. Participation in this study was voluntary, and participants had the right to withdraw their consent at any stage without facing any consequences. Smart PLS 4 was utilized to test the study hypotheses. This enables more reliable hypothesis testing over all pathways with a single test.

Results

The missing value analysis found that seven responses had better than 16% of the responses missing. Also, the boxplot analysis identified three distributed univariate outliers. Due to the huge amount of missing data and outliers, it was determined to remove these responses. However, 187 surveys were confidently determined to be suitable for analysis. To ensure that the independent variables were not multicollinear, tolerance variable statistics and the variance inflation factor (VIF) were applied. All VIF values were less than 10, and the tolerance coefficient was greater than 0.05 while smaller than 1. These numbers demonstrate that the dimensions are not multicollinear, allowing multiple regression analysis to be utilized to test the hypotheses (Hair et al., 2017).

Measurement Model

A few conditions have to be met to determine convergent validity. To be employed, factor loadings must first be larger than 0.70. Additionally, Cronbach's Alpha (CA) and Composite Reliability (CR) must both be greater than 0.70 (Hamid et al., 2022; Al-Zaqeba et al., 2023; Al-Taani et al., 2024). There must be more than 0.50 in the AVE. Furthermore, all builds had Cronbach's Alpha values greater than 0.70, indicating precise measurements. Moreover, all structures had an overall reliability of better than 0.70. Figure 2 illustrates the measurement model's convergent validity.

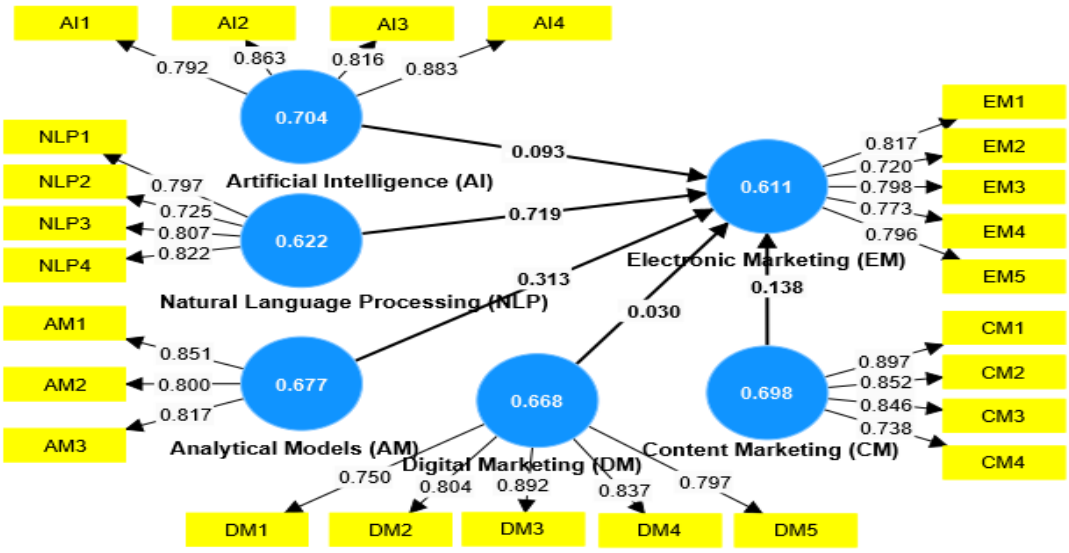

Figure 2. Measurement Model.

Each indication is shown in the corresponding yellow box, while latent variables are represented by the blue circles. Furthermore, the correctness of each signal and the construct's dependability concerning the variables under investigation are assessed by the values assigned to each arrow. An indicator that has a factor weight value greater than 0.50 is considered valid.

Table 1. Convergent validity.

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Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Analytical Models (AM)	0.768	0.802	0.863	0.677
Artificial Intelligence (AI)	0.861	0.869	0.905	0.704
Content Marketing (CM)	0.855	0.876	0.902	0.698
Digital Marketing (DM)	0.875	0.885	0.909	0.668
Electronic Marketing (EM)	0.840	0.841	0.887	0.611
Natural Language Processing (NLP)	0.799	0.810	0.868	0.622

Cronbach Alpha scores ranging from 86.4% to 93.7%, with a stability degree of 95.4%, should all be considered acceptable because they are more than 0.70, according to Sekaran and Bougie (2016). The Kolmogorov-Smirnov test revealed that the data distribution was as expected, with all significant values more than 0.05 (Jarah et al., 2022). Furthermore, the coefficient of variance inflation values was calculated to be 5, while the VIF, tolerance extracted, and coefficient of variance values ranged from 0.2-1.

Hypothesis Testing

All four latent variables have AVE values greater than the necessary value of 0.5, as can be seen in Table 1 above. The degree of variation caught by the latent variables concerning the measure errors is shown by the AVE measure. In this instance, the study's five latent variables all had AVE values higher than the suggested cut-off point of 0.5. In addition, Table 2 is related to the discriminant validity test. The explanation emphasises how the research's manifest variables satisfactorily satisfy the requirements for convergent validity, demonstrating that they are useful for measuring the relevant constructs. To fully comprehend the findings of the discriminant validity test and how they affect the measurement model, further data is necessary, as shown in Table 2. The standard for business research was followed by the researchers in this study, who used 95% confidence levels. The T-Statistics value indicates that the coefficient path score for the one-tailed hypothesis has to be higher than 1.65. Also, Table 2 presents the T-Statistics and Path Coefficients findings.

Table 2. Discriminant validity testing.

Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Analytical Models (AM) -> Electronic Marketing (EM)	0.180	0.181	0.037	4.872	0.000
Artificial Intelligence (AI) -> Electronic Marketing (EM)	0.220	0.219	0.037	5.881	0.000
Content Marketing (CM) -> Electronic Marketing (EM)	0.098	0.098	0.035	2.804	0.005
Digital Marketing (DM) -> Electronic Marketing (EM)	0.129	0.130	0.037	3.496	0.000
Natural Language Processing (NLP) -> Electronic Marketing (EM)	0.520	0.519	0.037	14.256	0.000

The findings are shown in Table 2 that the model has strong discriminant validity, as shown by the greater root values concerning their correlation coefficients. These results confirm the validity of the data and show that all indicators consistently evaluate the variables, as indicated by Composite Reliability (CR) scores greater than 0.7 and Cronbach's Alpha values greater than 0.6. Also, in Table 2 and Figure 3, the results indicate AI positively affects E-Marketing, and natural language processing, analytical models, content marketing, and digital marketing affect E-Marketing. Thus, H1 to H5 are accepted. To go deeper into the results of the hypothesis test, the following figure depiction is offered:

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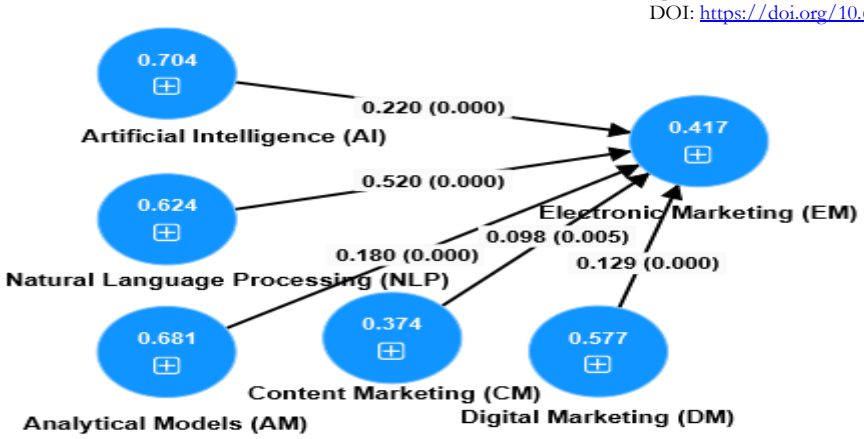

Figure 3. Discriminant validity testing.

Discussion and Conclusion

Most businesses and commercial organizations began selling their products electronically after sensing consumer or customer interest in E-marketing (Hailat, 2023). This is to swiftly execute marketing choices, give personalized customer care, and streamline marketing activities, giving you an advantage over rivals. AI is viewed as a revolution in e-marketing (Shaik, 2023). AI has transformed the corporate landscape (Vlačić et al., 2021). AI has improved marketing success in several ways (Shahid & Li, 2019). Furthermore, incorporating AI into digital marketing strategies through social media platforms may be extremely beneficial to marketers, allowing for the development of personal information and its usage in successful campaigns (Ardash et al., 2022). AI is also growing acceptance and relevance in the broader marketing field (Huang & Rust, 2022). Smart-marketing organizations that apply AI technology in their marketing activities confirm the increased utilization of digital content (Chandra et al., 2023). As a result, there is a need to strengthen the role of AI in improving marketing decisions and increasing productivity, promote scientific research, and develop a department dedicated to utilizing AI to activate E-marketing (Khalifa et al., 2023). Also, AI technologies are rapidly being applied in the sphere of digital marketing in today's technology era (Arshad et al., 2023). Therefore, E-marketing is an absolute need since it allows the firm to generate large earnings (Verma et al., 2021). To increase their chances of success, define AI as computerized systems that collect data and do tasks often performed by intelligent humans (Jarah et al., 2024). AI converts data into intelligent information, allowing retailers to leverage social media as an advertising tool (Saeed Bazuhair, 2022). As a result, AI solutions are among the most essential tools that businesses utilise to improve their online shopping experience and boost revenues (Abdulridha & Reshak, 2023). AI may be used to analyse data, forecast and propose products to clients, improve marketing operations, manage inventories, and enhance the logistics and shipping system (Zhang et al., 2021).

According to Fayed, (2021) study validates and theoretically establishes that AI makes a substantial contribution to formulating marketing plans by analyzing the environment, and rivals' methods, and setting marketing goals. Dharmaputra et al. (2021) found that the perceived ease of use of AI substantially and positively influenced customers' convenience and cost reduction as e-marketing results. Sadeq et al. (2023) found that AI applications had a statistically significant influence on e-marking and its competitive advantage. Khalifa et al. (2023) discovered that the actuality of employing AI was accomplished to a large extent in the website's E-marketing. Ghaith et al. (2023) found an influence of AI on marketing performance. Shaik (2023) research examines the impacts of AI integration in marketing, the benefits and challenges of AI integration in marketing, and your company's before and post-AI marketing strategy. Sumitha, (2022) discovered that AI is an unavoidable component of the future marketing and sales environment. According to Mahany (2022) research, consumers' high degree of understanding of technological applications in e-marketing adds to their increased awareness of privacy issues. Also, Jebril et al. (2023) discovered that both strategic intelligence and asset management have a favorable influence on boosting competitive advantage when cybersecurity plays a mediating role.

As a result, the purpose of this study was to determine the impact of artificial intelligence (AI) in design on company e-marketing. This study used a survey design with a quantitative approach, with the target group

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being workers of E-Marketing companies. 198 surveys were also gathered from Jordanian E-Marketing companies; however, 187 questionnaires were judged viable for study. The findings reveal that AI has a favorable impact on E-Marketing, as do natural language processing, analytical models, content marketing, and digital marketing. Based on the findings, the researchers suggest employing artificial intelligence to investigate consumer behavior models, forecast market trends, and uncover strategic prospects for electronic marketing. As a result, artificial intelligence may be used to efficiently drive marketing initiatives, such as properly identifying the target demographic or personal items for each consumer, resulting in higher success rates and a better shopping experience for customers.

References

Ababneh, A. M. D., Jarah, B. A. F., Al-Kharabsheh, A., Al-Zaqeba, M. A. A., & Basheti, I. (2024). The role of human resources management in the development of total quality management in the public and private sectors in Jordan. Humanities and Social Sciences Letters, 12(2), 319-330.

Abdulridha, A. O., & Reshak, K. A. (2023). Using Artificial Intelligence in E-Marketing Companies. Warith Scientific Journal, 5(May).

Abunasser, B. S., Daud, S. M., & Abu-Naser, S. S. (2023). Predicting Stock Prices using Artificial Intelligence: A Comparative Study of Machine Learning Algorithms. International Journal of Advances in Soft Computing & Its Applications, 15(3), 41-53. doi: 10.15849/IJASCA.231130.03.

Aghion, P., Antonin, C., & Bunel, S. (2019). Artificial intelligence, growth and employment: The role of policy. Economie et Statistique/Economics and Statistics, (510-511-512), 150-164.

Al Zobi, M. T. K., & Jarah, B. A. F. (2023). The Role of Internal Auditing in Improving the Accounting Information System in Jordanian Banks by Using Organizational Commitment as a Mediator. Risks, 11(9), 153.

Alazzam, F. A., Safronska, I., Rodchenko, S., Kornieieva, T., Zaiarniuk, O., & Kushnir, Y. (2024). Re-engineering of business processes of machine-building enterprises: increasing the efficiency of commercial activities, Financial and credit activity problems of theory and practice, 1(54), 440-450.

Almaiah, M. A., Alfaisal, R., Salloum, S. A., Hajjej, F., Thabit, S., El-Qirem, F. A., ... & Al-Maroof, R. S. (2022). Examining the impact of artificial intelligence and social and computer anxiety in e-learning settings: Students' perceptions at the university level. Electronics, 11(22), 3662.

Almajali, M. H., Nasrawin, L., Alqudah, F. T., Althunibat, A. A., & Albalawee, N. (2023). Technical Service Error as a Pillar of Administrative Responsibility for Artificial Intelligence (AI) Operations. International Journal of Advances in Soft Computing & Its Applications, 15(3), 274–287. doi: 10.15849/IJASCA.231130.18.

Almatarneh, Z., Zaqeeba, N., Jebril, I., & Jarah, B. A. F. (2023). The role of financial accounting technology in improving customer relationship management in Jordanian banks. Asian Economic and Financial Review, 13(12), 1008-1019.

Alsmadi, A. A., Shuhaiber, A., Al-Okaily, M., Al-Gasaymeh, A., & Alrawashdeh, N. (2023). Big data analytics and innovation in e-commerce: current insights and future directions. Journal of Financial Services Marketing, 1-18.

Al-Taani AHM, Al-Zaqeba MAA, Maabreh HMA, and Jarah BAF (2024). Exploring the impact of digital accounting and digital zakat on improving business sustainability in the Middle East and Malaysia. International Journal of Advanced and Applied Sciences, 11(1): 56-67. https://doi.org/10.21833/ijaas.2024.01.007.

Alwreikat, E., & Aliqteshat, A. (2024). Legal regulation of raising the interest rate on the financial consumer. Al-Zaytoonah University of Jordan Journal for Legal studies, 5(1), 1-21. doi: 10.15849/ZJJLS.240330.0.

Al-Zaqeba MAA, Shubailat OM, Abdul Hamid S, Jarah BAF, Ababneh FAT, and Almatarneh Z (2023). The influence of board of directors' characteristics on corporate social responsibility disclosures in Jordanian Islamic banks. International Journal of Advanced and Applied Sciences, 10(11): 1-13.

Al-Zaqeba MAA, Shubailat OM, Abdul Hamid S, Jarah BAF, Ababneh FAT, and Almatarneh Z (2023). The influence of board of directors' characteristics on corporate social responsibility disclosures in Jordanian Islamic banks. International Journal of Advanced and Applied Sciences, 10(11): 1-13. https://doi.org/10.21833/ijaas.2023.11.001.

AlZu'bi, S., Alsmirat, M., Al-Ayyoub, M., & Jararweh, Y. (2019, November). Artificial intelligence enabling water desalination sustainability optimization. In 2019 7th international renewable and sustainable energy conference (IRSEC) (pp. 1-4). IEEE.

Ardash, M., Hussain, A. I., & Mahmmoud, S. (2022). Employing Artificial Intelligence to Improve E-marketing Strategies for Advertising Platforms on social media. Journal of Design Sciences and Applied Arts, 3(2), 146-155.

Arshad, M. S., Ahmad, T., Fatima, N., Munir, U., Shahzad, H., & Ilyas, W. (2023). The Role of Artificial Intelligence in Personalizing Digital Marketing Campaign. Available at SSRN 4675068.

Basheer, M. (2024). The legal framework for the principle of the right to economic self-determination. Al-Zaytoonah University of Jordan Journal for Legal studies, 5(1), 201-220. doi: 10.15849/ZJJLS.240330.11.

Benhmad, T., Rhaimi, C. B., Alomari, S., & Aljuhani, L. (2024). Design and Implementation of an Integrated IoT and Artificial Intelligence System for Smart Irrigation Management. International Journal of Advances in Soft Computing and its Application, 16(1), doi: 10.15849/IJASCA.240330.12.

Carracedo, P., Juan Angel A., Lopez Lopez, D., Marmol, M., & Ward, A. (2023). Data analytics and artificial intelligence in e-Marketing: techniques, best practices and trends. International Journal of Data Analysis Techniques and Strategies, 15(3), 147-178. https://doi.org/10.1504/IJDATS.2023.133019.

Chan, L., Hogaboam, L., Cao, R. (2022). Artificial Intelligence in Marketing and Sales. In: Applied Artificial Intelligence in Business. Applied Innovation and Technology Management. Springer, Cham. 65-82. https://doi.org/10.1007/978-3-031-05740-3_5.

Journal of Ecohumanism
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Chandra, K. V., Rani, K. S., Singh, P., Rambabu, C. V., Sagar, K. V., & Billa, P. (2023, October). Artificial Intelligence Techniques to Revolutionize the Marketing Strategies for Enormous Business Expansion. In 2023 First International Conference on Advances in Electrical, Electronics and Computational Intelligence (ICAEECI) (pp. 1-5). IEEE.

Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. Journal of the Academy of Marketing Science, 48, 24-42.

Dharmaputra, R. T., Fernando, Y., Aryshandy, G., & Ikhsan, R. B. (2021). Artificial Intelligence and Electronic Marketing Outcomes: An Empirical Study. In 2021 3rd International Conference on Cybernetics and Intelligent System (ICORIS) (pp. 1-6). IEEE.

Fayed, A. E. (2021). Artificial Intelligence for marketing plan: the case for e-marketing companies. Marketing i menedžment innovacij, (1), 81-95.

Ghaith, R. E. A., Al-Hawary, S. I. S., Mohammad, L. S., Singh, D., Mohammad, A. A. S., Al-Adamat, A. M., ... & Alqahtani, M. M. (2023). Impact of Artificial Intelligence Technologies on Marketing Performance. In Emerging Trends and Innovation in Business and Finance (pp. 49-60). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-99-6101-6_4.

Grewal, D., Hulland, J., Kopalle, P. K., & Karahanna, E. (2020). The future of technology and marketing: A multidisciplinary perspective. Journal of the Academy of Marketing Science, 48, 1-8.

Hailat, K., Jarah, B., Al-Jarrah, M., & Almatarneh, Z. (2023). The impact of electronic banking services on the use of technology by customers of conventional and Islamic banks in Jordan. International Journal of Data and Network Science, 7(2), 737-744.

Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. International Journal of Multivariate Data Analysis, 1(2), 107-123.

Hamid, S. A., Al-Zaqeba, M. A. A., Ibrahim, N., & Ibrahim, M. A. (2022). Tax Treatment on Islamic Home Financing in Malaysia and Jordan.

Hassan, A. (2021). The usage of artificial intelligence in digital marketing: A review. Applications of Artificial Intelligence in Business, Education and Healthcare, 357-383.

Huang, M. H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. Journal of the Academy of Marketing Science, 49, 30-50.

Huang, M. H., & Rust, R. T. (2022). A framework for collaborative artificial intelligence in marketing. Journal of Retailing, 98(2), 209-223.

Jarah, B. A. F., AL Jarrah, M. A., Al-Zaqeba, M. A. A., & Al-Jarrah, M. F. M. (2022). The role of internal audit to reduce the effects of creative accounting on the reliability of financial statements in the Jordanian islamic banks. International Journal of Financial Studies, 10(3), 60.

Jarah, B. A. F., Alghadi, M. Y., Al-Zaqeba, M. A. A., Mugableh, M. I., & Zaqaibeh, B. (2024). The influence of financial technology on profitability in Jordanian commercial banks. Humanities and Social Sciences Letters, 12(2), 176-188.

Jarah, B. A. F., Zaqeeba, N., Al-Jarrah, M. F. M., Al Badarin, A. M., & Almatarneh, Z. (2023). The Mediating Effect of the Internal Control System on the Relationship between the Accounting Information System and Employee Performance in Jordan Islamic Banks. Economies, 11(3), 77.

Jawad, N., & Abu Huaij, W., & Alshara, A., Aldwari, T. (2024). the impact of innovation management on creativity value. Al-Zaytoonah University of Jordan Journal for Legal studies, 5(1), 81-100. doi: 10.15849/ZJJLS.240330.05.

Jebril, I., Almaslmani, R., Jarah, B., Mugableh, M., & Zaqeeba, N. (2023). The impact of strategic intelligence and asset management on enhancing competitive advantage: The mediating role of cybersecurity. Uncertain Supply Chain Management, 11(3), 1041-1046.

Khalifa, W. A. B., Alshorman, B. A., Seddik, W. A., Zahou, A. M. E., Torky, M. S., Rizk, M. F., ... & Yousif, M. A. A. B. (2023). The Reality of Using Artificial Intelligence Applications in Developing E-Marketing in the Kingdom of Saudi Arabia. Migration Letters, 20(S3), 146-158.

Krishna, S. H., Sargunam, S. S., Kulkarni, N., Nandal, N., Chellam, V. V., & Praveenkumar, S. (2023, January). Application of Artificial Intelligence in E-Marketing. In 2023 International Conference on Artificial Intelligence and Knowledge Discovery in Concurrent Engineering (ICECONF) (pp. 1-7). IEEE.

Mahany, M. M. M. (2022). E-Marketing use of artificial intelligence (AI) and big data analysis applications and its impact on privacy in the digital age. The journal Future of Social Sciences, 8(3), 205-264.

Papadopoulos, D., Gkintoni, E., Halkiopoulos, C., & Antonopoulou, H. (2018). A Computational Approach of Consumer Decision Making Process Emotional Intelligence and Their Effects on E-Marketing. In 6th International Conference on Contemporary Marketing Issues (ICCMI) (pp. 27-29).

Paschen, J., Kietzmann, J., & Kietzmann, T. C. (2019). Artificial intelligence (AI) and its implications for market knowledge in B2B marketing. Journal of business & industrial marketing, 34(7), 1410-1419.

Qinghua, Y., & Tao, Z. (2024). Services for a sustainable lifestyle targeting Generation Z. Asian Business Research Journal, 9, 7–15. https://doi.org/10.55220/25766759.153

Sadeq, N., Nassreddine, G., & Younis, J. (2023). Impact of Artificial Intelligence on E-marketing. International Journal of Trend in Scientific Research and Development (IJTSRD), 7(1), 1318-1331.

Saeed Bazuhair, N. A. (2022). Artificial Intelligence Applications And Their Impact On Digital Marketing: Case Study Of Noon Platform. Webology (ISSN: 1735-188X), 19(6).

Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach. john wiley & sons.

Shahid, M. Z., & Li, G. (2019). Impact of artificial intelligence in marketing: a perspective of marketing professionals of Pakistan. Global Journal of Management and Business Research, 19(2), 27-33.

Shaik, M. (2023). Impact of artificial intelligence on marketing. East Asian Journal of Multidisciplinary Research, 2(3), 993-1004.

Shakhatreh, H. J. M., Salih, A. J., Aldrou, K. K. A. R., Alazzam, F. A. F., & Issa, M. S. B. (2022). Medico-Legal Aspects of Abortion: Updates of the Literature. Medical Archives, 76(5), 373.

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DOI: https://doi.org/10.62754/joe.v3i4.3480

Stăncioiu, T. S., Spînu, A. E., Sanda, C. M., Sanda, G., & Trifan, V. A. (2023). Customer Relationship Management, Operational Digitization, Production Optimization and Value Creation through Artificial Intelligence in e-Marketing. In Proceedings of the International Conference on Business Excellence (Vol. 17, No. 1, pp. 1148-1157).

Sumitha, K. (2022). A Comparative Analysis of Artificial Intelligence in Marketing and Traditional Marketing. International Journal of Business Analytics and Intelligence, 10(1), 16.

Thiraviyam, T. (2018). Artificial intelligence marketing. International Journal of Recent Research Aspects, 4, 449-452.

Verma, S., Sharma, R., Deb, S., & Maitra, D. (2021). Artificial intelligence in marketing: Systematic review and future research direction. International Journal of Information Management Data Insights, 1(1), 100002.

Vlačić, B., Corbo, L., e Silva, S. C., & Dabić, M. (2021). The evolving role of artificial intelligence in marketing: A review and research agenda. Journal of Business Research, 128, 187-203.

Ward, A. F., Marmol, M., Lopez-Lopez, D., Carracedo, P., & Juan, A. A. (2023). Data analytics and artificial intelligence in e-marketing: techniques, best practices and trends. International Journal of Data Analysis Techniques and Strategies, 15(3), 147-178.

Zhang, D., Pee, L. G., & Cui, L. (2021). Artificial intelligence in E-commerce fulfillment: A case study of resource orchestration at Alibaba's Smart Warehouse. International Journal of Information Management, 57, 102304.