Artificial Intelligence Technologies as a Mechanism for Activating Digital Marketing: A Presentation of Global Experiences

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Abstract: *In recent years, the world has witnessed a revolution in the field of technology and digitization, through many technologies, which have become an emerging trend of artificial intelligence in various disciplines, especially marketing.*

This paper was designed to highlight the various AI technologies that play an important role in the success of digital marketing. Today's institutions have to use their technologies to ensure that they stay in the market and outperform their competitors, especially in terms of customer service. This can be illustrated by showcasing successful international experiences in integrating AI technologies into digital marketing.

The results of the study found that artificial intelligence is of outstanding importance through many applications and examples of brands and institutions that have succeeded deservedly in outperforming their competitors and gaining their clients' satisfaction using AI-based marketing methods and strategies.

Keywords: digitization, artificial intelligence, marketing, digital marketing.

JEL Classification: O33, M31.

ملخص : شهد العالم في السنوات الأخيرة ثورة في مجال التكنولوجيا والرقمنة، من خلال العديد من التقنيات والتي أصبح الذكاء الاصطناعي اتجاها ناشئا منها في مختلف المجالات ولا سيما التسويقية منها.

جاءت هذه الورقة البحثية بهدف تسليط الضوء على مختلف تقنيات الذكاء الاصطناعي والتي تلعب دورا هاما في إنجاح التسويق الرقمي، حيث أصبح لزاما على المؤسسات اليوم توظيف تقنياته من أجل ضمان بقائها في السوق والتفوق على منافسيها خاصة في مجال خدمة العملاء، ويمكن توضيح ذلك من خلال عرض تجارب عالمية ناجحة في دمج الذكاء الاصطناعي في التسويق الرقمي.

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وتوصلت نتائج الدراسة أن للذكاء الاصطناعي أهمية بارزة من خلال العديد من التطبيقات والأمثلة لعلامات ومؤسسات نجحت وبجدارة في التفوق على منافسيها وكسب رضا عملائها باستخدام طرق وإستراتيجيات تسويقية مستندة على الذكاء الاصطناعي.

الكلمات المفتاحية : الرقمنة، الذكاء الاصطناعي، التسويق، التسويق الرقمي.

1.Introduction

Digital marketing is one of the principales element of modern marketing knowledge that has received great attention in recent years, as it has facilitated access to the essence of promoting products and services, which led to an increase in demand for them, and the rapid developments witnessed by the world in the field of information technology highlighted the need to innovate more modern marketing methods than the traditional ones previously used.

Since all organizations today aim to use the newest techniques and technologies to complete their tasks, reach their target audience, and make money, marketing experts have started searching for different software and technologies that make this task easier. Artificial intelligence is arguably one of the most significant of these technologies.

So, It can be considered that investing in AI is an important and effective pillar by contributing to moving the field of marketing to a fictional field, as many digital marketing procedures today need specialized workers to respond immediately to customer messages and comments as well as provide them with various information related to the product or service, which contributes to reducing the pressure on companies.

1.1The problem of the study and the sub-questions:

The research problem revolves around the impact and relationship between the artificial intelligence and the digital marketing. Consequently, the question raised is as follow: How Artificial Intelligence can contribute to the success of digital marketing?

To further clarify the problem, the following sub-questions arose:

1) What are the key concepts of artificial intelligence and digital marketing?

2) What are the most useful AI technologies that can help digital marketing?

3) Are AI technologies contributing to profitability for companies that rely on digital marketing?

1.2 Study objectives :

- Recognize the relationship between artificial intelligence and digital marketing.
- Increase awareness among Arab researchers of the importance of integrating AI in digital marketing.
- Highlighting some of the companies that relied on artificial intelligence in their marketing processes.

1.3 Study importance :

The importance of this study is due to the recent application of AI technology in general, and in marketing in particular, which makes it an interesting focus for research in order to recognize the benefits of integrating AI techniques in digital marketing.

1.4 Study methodology:

To fulfill the purpose of this study, a descriptive-analytical approach was followed through an analytical literature review. It is useful to explain the relationship between AI and digital marketing by providing this study with examples of companies that have incorporated AI technologies into their marketing processes and activities.

2 Literature review

2.1 Artificial Intelligence definition:

Artificial intelligence can be defined as a group of intelligent machines that monitor the environment and try to achieve their goals (Basha, 2023). Artificial intelligence (AI) refers to computer systems capable of performing complex tasks, such as thinking, making decisions, or solving issues (Jaya, 2024).

From this two definitions we can say that AI is a new concept which facilitate the life of the world as whole.

2.2 Artificial Intelligence types:

AI can be divided into three main types as follows:

- Narrow AI: This is the most widespread nowadays, as it can perform specific tasks such as image recognition and self-driving cars
- General AI: Its ability is very similar to human cognitive ability; it makes a machine work and thinks like a human.
- Super AI: This is a fictitious term that has nothing to do with reality yet, as it considers the ability of a machine to surpass the ability of a human. (Benchiha & Ladjelat, 2024)

2.3 Digital Marketing definition:

Marketing is defined by the American Marketing Association as the activity or set of activities of organizations and processes for creating, delivering, and exchanging offers that have value to customers, partners, and society at large (Mustak, et al., 2021).

Digital marketing is the use of all available technologies to meet the desires of each customer individually for the purpose of making profits, including analyzing customer data, identifying their needs and providing them with appropriate offers, which leads to enhanced brand loyalty (Basbas & Guessas, 2024).

In general digital marketing is" one of the components of marketing that utilizes internet and online based digital technologies" (Lavanya & Radhikamani, 2021)

2.4 Applications of artificial intelligence in digital marketing:

There are many AI applications that greatly help in interacting with companies and customers through digital marketing, most notably:

- Data analysis and insights: It aims to uncover valuable insights about consumer behavior, needs and desires through artificial intelligence algorithms that analyze big data from multiple sources, which helps decision-making easily and facilitates the process of understanding customers better.
- Personalization: Artificial intelligence (AI) helps personalized marketing campaigns capture data that makes it easier to deliver content and offers to consumers, boosting engagement and conversion.
- Predictive analytics: This data predicts future results based on existing data and market conditions, allowing marketers to anticipate customer needs and seek to fulfill them by providing appropriate strategies.
- Chatbots and virtual assistants: Help answer queries and provide guidance and information about products and services to customers.
- Content Creation and Curation: Through AI-powered articles and videos as well as social media posts such as Facebook and Instagram, for example, creating content that attracts the target audience.
- Advertising Optimization: Through artificial intelligence algorithms such as analyzing performance metrics, targeting criteria, and audience behavior to increase return on investment (ROI).
- Search engine optimization (SEO) and content optimization: By analyzing keywords and back links as well as user engagement metrics.
- Voice Search Optimization: AI technologies optimize content for voice search queries and adapt search engines to conversational language patterns.
- Marketing Automation: By streamlining repetitive tasks, such as email marketing and social media, it frees up time for marketers to focus on both planning and creativity (Bhuvaneswari, et al., 2024)

2.5 Ways to pump up digital marketing efforts using AI:

- Predictive analytics and propensity modeling to predict customer behavior: by designing a statistical scorecard called the propensity model, which correlates customer attributes with expected behavior, it also suggests ways to reach and identify the target audience. It works in the following ways:
  - Define the objectives and analyze the extracted data in order to find the desired model.
  - Validate the model based on the predefined objectives.
  - Applying the final model and thus making the best decision.

- Optimized Mobile Pages to Cut Down on Page Load Time: by making it easier to create mobile-optimized content once to load it instantly everywhere, Google has also announced that the AMP web pages will be a lighter version than before in order to improve the user experience, offering a better chance of appearing in Google's top three search results.
- Using chat bots powered by AI to enhance user experience: by coordinating instant messaging with customers, this is what makes every digital marketing website stand out from the rest (Dey, 2024)

2.6 Benefits of using Artificial Intelligence in digital marketing:

Companies that rely on AI in their marketing have the ability to create a sustainable competitive advantage, as it helps reduce costs as well as increase revenues, and some of its most important benefits include the following:

- Achieve greater return on investment with AI-powered marketing campaigns.
- Anticipate customer needs more accurately.
- Deliver personalized consumer experiences.
- Deliver a multitude of actionable creative ideas.
- Increase the speed of decision-making.
- Easily find missing data.
- Manage the high quality of the marketing department (Alit, 2023)

2.7 Global experiences:

There are many companies and brands that have integrated AI technologies into their marketing strategies, the most important of which are:

1. **Amazon:** founded in 1994 by Jeff Bezos in the United States of America, the company's logo is a smile that stretches from A to Z, meaning it provides all the products that fulfill customers' desires.

The company has integrated artificial intelligence into its applications:

- Alexa: is Amazon's cloud-based voice service available on more than 100 million devices from Amazon and third-party device manufacturers. With Alexa, natural voice experiences can be created that provide customers with a more intuitive way to interact with the technology they use every day (Anon., s.d.).
- Amazon Q: is the generative AI assistant that is transforming the way work gets done in organizations. With specialized capabilities for software developers, business intelligence analysts, call center agents, supply chain analysts, and anyone who innovates with AWS, Amazon Q helps every employee gain insights into their data and accelerate their tasks. By leveraging Amazon Q's advanced agent

capabilities in Amazon Q, businesses can streamline operations, make decisions faster, and help employees maximize their productivity (Anon., s.d.).

2. **L'Oréal Paris:**a company that specializes in personal care products including makeup, fragrances, skin care, hair care, sun protection, and coloring products. These products are marketed through several brands including: L'Oréal Professionnel, Redken, Matrix, Giorgio Armani Beauty.
    - Skin Genius: is powered by high-technology program that learned how to compare your skin to a library of 10,000 real images scored by real dermatologists and experts. It does not replace a live consultation, but it's so smart and precise, it can predict up to 97% the in-person clinical grading on 8 clinical parameters on a wide range of caucasian, asian and afro-american phototypes. The artificial intelligence then recommends ingredients, products and routines that will work for you. And it's all private. Your picture is not recorded, and unless you want to share with your friends, you are the only one to see the results (Anon., s.d.).
    - Yves Saint Laurent Rouge Sur Mesure: powered by Perso is an innovation that marks the start of a new era in which beauty is perfectly tailored to each individual's expectations, complexion, or outfit. Moreover, through the app, at-home users can access this beauty whilst at the same time benefitting from the expertise and advice that are the hallmarks of the YSL Beauty brand (Anon., s.d.).
3. **Affectiva:** It is machine learning-based software that can detect complex and subtle states of human cognitive and emotional states. It can detect emotions the way humans do, by reading non-verbal cues such as facial expressions, gestures, and body language. This is where we see the importance of emotional AI. It is key to humanizing technology and bridging the gap between humans and machines (Anon., s.d.).
4. **Microsoft:** is an American computer and microcomputer multinational, founded in 1975 by Bill Gates and Paul Allen.

Some of its most important AI-based applications include:

- Microsoft Copilot: is a chatbot developed by Microsoft and launched on February 7, 2023. Based on a large language model, it is capable of quoting sources, creating poems, and writing songs. It is the main replacement for Cortana, which has been commercially discontinued (Anon., s.d.).

5. **Google:** the company has created SynthID, a tool for watermarking and identifying images created by artificial intelligence. The technology embeds a digital watermark directly into the pixels of an image, making it imperceptible to the human eye, but detectable for identification (Gowal & Kohli, 2023).

Through the examples of the companies mentioned above, it can be said that the integration of AI applications in digital marketing has brought about a radical change in marketers' aspirations and the diversity of their strategies, making digital marketing more personalized to customers, meeting their desires, and saving time.

These major brands are using AI within their marketing strategies to improve the customer experience and attract more customers, thus increasing profits and gaining a sustainable competitive advantage.

3 Conclusion

The integration of artificial intelligence (AI) into digital marketing has revolutionized the way businesses interact with customers, optimize campaigns, and deliver results. AI-powered technologies such as predictive analytics, chatbots, and marketing automation have enabled marketers to leverage data-driven insights and streamline operations at scale. By leveraging the power of AI, businesses can easily understand customer behavior better, anticipate their needs, and deliver more relevant and impactful marketing messages. AI will play an increasingly vital role in shaping the future of digital marketing, enabling companies to achieve a sustainable competitive advantage, drive innovation, and more effectively achieve their marketing goals in a world characterized by rapid change, especially in the field of technology. The analysis of the collected examples (Amazon, L'Oréal Paris, Affectiva, Microsoft, and Google) shows that AI offers a new quality to a consumer's life. 24/7 customer service, hyper-personalised solutions, more convenient shopping, or the possibility to avoid making the wrong choice all contribute to a new dimension in the area of the marketing organisation. We can propose a set of recommendations:

- Intensifying the number of courses and forums to encourage students and researchers to expand further in this field.
- Working on developing and integrating AI applications in Algerian companies.
- Providing the modern technology needed to develop digital marketing.
- Trainning marketers on the latest AI technologies and how to integrate them into their work.

References

Alit, N., 2023. Employing artificial intelligence techniques as a mechanism to activate digital marketing: view global experiences. ***Finance and Business Economics Review****,* 07(01), pp. 71-72.

Anon., n.d. *https://aws.amazon.com/fr/q/?hp=gat3.* [Online]

[Accessed 01 Février 2024].

Anon., n.d. *https://developer.amazon.com/en-GB/alexa.* [Online]
[Accessed 01 Février 2024].

Anon., n.d. *https://fr.wikipedia.org/wiki/Microsoft_Copilot.* [Online]
[Accessed 01 Février 2024].

Anon., n.d. *https://www.affectiva.com/emotion-ai/.* [Online]
[Accessed 01 Février 2024].

Anon., n.d. *https://www.loreal.com/en/articles/science-and-technology/skin-genius-loreal-paris/.* [Online]
[Accessed 01 Février 2024].

Anon., n.d. *https://www.loreal.com/en/articles/science-and-technology/ysl-perso/.* [Online]
[Accessed 01 Février 2024].

Basbas, L. & Guessas, F., 2024. Integration of the application –chat gpt- the latest artificial intelligence technologies as a new direction for digital marketing - International models view-. ***Journal of economic studies****,* 18(03), p. 239.

Basha, M., 2023. Impact of Artificial Intelligence on marketing. ***East Asian Journal of Multidisciplinary Research (EAJMR****),* 02(03), p. 995.

Benchiha, F. & Ladjelat, I., 2024. The trend towards applying artificial intelligence in digital marketing -With reference to some international models-. ***Journal of Economic Studies****,* 18(03), p. 326.

Bhuvaneswari, L. et al., 2024. The Impact Of Artificial Intelligence (AI) On Digital Marketing. ***Migration Letters****,* 21(06), pp. 1134-1135.

Dey, K., 2024. Artificial Intelligence in Marketing. ***International Journal of Novel Research and Development****,* 09(04), pp. 745-746.

Gowal, S. & Kohli, P., 2023. *https://deepmind.google/discover/blog/identifying-ai-generated-images-with-synthid/.* [Online]
[Accessed 01 Février 2024].

Jaya, K., 2024. Artificial Intelligence in Marketing. ***International Research Journal on Advanced Engineering and Management****,* 02(03), p. 152.

Lavanya, A. & Radhikamani, M., 2021. A Study on Digital Marketing and it's Impacts. ***International Journal of Creative Research Thoughts****,* 09(05), p. 677.

Mustak, M., Salminen, J., Plé, L. & Wirtz, J., 2021. Artificial intelligence in marketing: Topic modeling, scientometric analysis, and research agenda. ***Journal of Business Research****,* Volume 124, p. 03.