

## EVOLUTION OF DIGITAL MARKETING: FROM SEO TO AI-BASED PERSONALISATION

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### Abstract

The evolution of digital marketing has shown a transformation from traditional techniques such as SEO (Search Engine Optimisation) to modern strategies supported by artificial intelligence (AI) and personalisation. Initially, digital marketing focused on increasing visibility on the internet through the use of keywords, backlinks, and optimal site structure. However, technological developments have brought about a shift towards a more in-depth data-driven approach, enabling a more accurate understanding of user behaviour and consumer preferences. Today, the integration of AI in digital marketing enables personalisation of content for users, with the ability to process big data and identify complex patterns. This technology not only improves efficiency but also provides a more relevant and human user experience. Thus, the future of digital marketing will continue to evolve as innovative technologies are adopted to meet increasingly complex consumer needs.

**Keywords:** Evolution, Digital Marketing, SEO to AI-Based Personalisation.

### Introduction

With the ever-evolving digital age, marketing has undergone a significant transformation from traditional methods to more innovative and high-tech approaches. Digital marketing encompasses a variety of strategies such as SEO, social media, content marketing, email marketing, and paid advertising, all designed to increase online visibility and engagement with customers (Haenlein & Kaplan, 2019). In an increasingly connected world, digital marketing enables businesses to reach a wider audience efficiently and effectively. Not only that, digital marketing also offers the ability to target consumers based on their preferences, location, and behaviour, which increases the chances of conversion and customer retention (Kumar & Shah, 2018).

In addition, digital marketing provides companies with the tools and analytics metrics needed to measure the performance of their campaigns in real-time. With this data, businesses can make the right and quick adjustments to increase the effectiveness of their marketing strategies, which is a significant competitive advantage in a dynamic market. The ability to accurately track ROI (Return on Investment) allows companies to allocate resources more wisely and adopt a more informed approach to decision making. Therefore, digital marketing is not only important to achieve sustainable business growth but also to maintain competitiveness in an ever-evolving industry (Hall & Sartor, 2017).

However, as technology evolves and consumer behaviour changes, an SEO-based marketing approach alone is no longer enough to meet the personalisation needs of the modern consumer. The emergence of artificial intelligence (AI) offers new possibilities for more sophisticated and efficient marketing personalisation. AI enables businesses to collect and analyse large amounts of consumer data and apply these insights to create more relevant and personalised experiences (Davenport & Ronanki, 2018).

The development from traditional SEO to AI-based personalisation reflects an evolution triggered by the need for more dynamic and personal interactions with customers. When AI can help in providing product recommendations, predicting consumer behaviour, and marketing automation, it brings about drastic changes in the way companies approach their consumers. This raises questions about how businesses can effectively integrate these AI capabilities with their existing marketing strategies (Huang & Rust, 2018).

This study aims to track the evolution, analyse the influence of each stage in digital marketing, and understand how businesses can utilise AI technology to create more effective personalisation. By understanding the transformation from SEO to AI-based personalisation, companies can design more innovative and adaptive marketing strategies amid rapid changes in technology and consumer behaviour.

## **Research Methods**

The study in this research uses the literature method. The literature research method is a research approach that involves the collection, assessment, and analysis of various written sources relevant to a particular research topic or question. These sources can include books, journal articles, research reports, dissertations, and other available digital materials (Okoli, 2015); (Randolph, 2009). The main objectives of literature research are to build a strong theoretical basis, identify knowledge gaps in a particular field of study, and formulate informed research hypotheses or questions. In this process, researchers evaluate the credibility, relevance, and contribution of each source, and integrate the information obtained into a cohesive analytical framework. Through critical analysis of existing works, literature research can provide deep insights and help determine the direction of further research (Grant & Booth, 2009).

## **Results and Discussion**

### **SEO in Digital Marketing**

Search Engine Optimisation (SEO) is an important strategy in digital marketing that aims to increase the visibility of a website on search engine results pages (SERPs) such as Google, Bing, and Yahoo. Given that the majority of internet users start their search for information, products, or services through search engines, ranking highly on SERPs is crucial to getting clicks and increasing organic traffic to websites. SEO covers

various tactics including on-page SEO, off-page SEO, and technical SEO aspects that all together support achieving higher rankings and better user experience (Leeftlang et al., 2014).

On-page SEO refers to the practice of optimising the internal elements of your website to make it more appealing and relevant to search engines and visitors. This includes the use of appropriate keywords in page titles, meta descriptions, header tags (H1, H2, etc.), and main content on web pages. In addition, ensuring high-quality and relevant content, the use of search engine-friendly URLs, and the optimisation of images with alternative text (alt text) is also very important. On-page SEO aims to ensure that search engines can easily understand the topic of your page and relate it to the keywords that users are searching for (Moore & Kearsley, 2011).

While on-page SEO concentrates on internal factors, off-page SEO emphasises external activities that help improve the authority and reputation of your website. One of the main factors in off-page SEO is getting high-quality backlinks from sites that have high authority. Backlinks are links that point to your site from other websites, which are considered a 'vote of confidence' or recommendation that can increase the credibility of your site in the eyes of search engines. In addition to backlinks, off-page SEO strategies also include social media activities, guest blogging, and other efforts that support branding and public relations (PR) (Kannan & Li, 2017).

Technical SEO relates to the technical aspects of a website that influence indexing and crawling by search engines. These elements include improved page speed, compatibility with mobile devices, a clean URL structure, the use of HTTPS for security, and the presence of a sitemap XML file. Ensuring that your website has a good structure and is easily accessible to search engines helps them index your content more efficiently, which in turn increases your visibility in search results. Technical SEO also includes fixing crawl errors, making absolutely sure there is no duplicate content, and fixing internal link structures (Charlesworth, 2018).

It is not only important to implement an SEO strategy, but also to continuously analyse and monitor your SEO performance. Tools such as Google Analytics and Google Search Console can help track organic traffic, click-through rate (CTR), and keyword rankings. With this data, you can understand what is and isn't working, and make the necessary adjustments to keep your SEO strategy effective. In addition, monitoring competitors and changes in search engine algorithms is also very important to ensure you remain competitive (Chaffey & Ellis-Chadwick, 2019).

Thus, SEO is an essential component of digital marketing that requires a strategic and comprehensive approach to optimise the visibility of your website in search engines. By combining on-page SEO, off-page SEO, and technical SEO, businesses can improve their ranking on SERPs and attract more quality organic traffic. Ultimately, investing in SEO not only helps to get more visitors but also to build credibility and a strong online reputation, which is very important in an increasingly competitive digital

business landscape. Through continuous monitoring and adjustment practices, SEO can continue to be a very effective tool for achieving sustainable digital marketing goals (Rust & Huang, 2014).

### **The Role and Influence of AI in Digital Marketing**

One of the main roles of AI in digital marketing is to increase the efficiency of marketing campaigns. With AI, companies can analyse data on a large and in-depth scale, enabling faster and more accurate decision making. AI also enables the automation of various marketing tasks, such as ad management, email marketing, and data analysis. This system can optimise ad placement, choose the best time to send emails, and even suggest content that is suitable for a particular audience (Kumar & Shah, 2018).

AI enables content personalisation in a more sophisticated way. For example, machine learning algorithms can learn consumer preferences and habits, then deliver relevant and personalised content according to audience needs. With this step, the level of consumer engagement increases because they feel that the content is truly intended for them. It also increases the likelihood of sales conversions because customers feel valued and understood (Järvinen & Taiminen, 2016).

In digital marketing, analytics and predictions play an important role. AI can analyse customer behaviour patterns and market trends, providing deeper insights for companies. With this information, companies can anticipate the future needs and desires of customers and adjust their marketing strategies. For example, AI can predict which products will be in demand in the future, enabling companies to plan stock and promotions more effectively (Telingator, 2017).

AI technology, such as chatbots and virtual assistants, has changed the way companies interact with customers. Chatbots that use AI can provide fast and timely responses, thus increasing customer satisfaction. These chatbots can be used to respond to general questions, provide product recommendations, and resolve customer complaints, all of which are done automatically and efficiently. This allows companies to stay connected to customers without the need to significantly increase support staff (Kotler & Keller, 2016).

With the use of AI, companies can save on advertising and marketing costs. AI helps minimise wasteful spending on advertising by targeting the right audience based on analysed data. In addition, the automation of marketing tasks reduces the need for manual labour, thus saving on operational costs. For example, AI can identify which advertisements are underperforming and automatically adjust budget allocations to more effective advertisements (Urban et al., 2000).

AI opens the door to innovation in creating unique and engaging customer experiences. By using AI-powered technologies such as augmented reality (AR) and virtual reality (VR), companies can provide interactive experiences that can increase

customer engagement. For example, an online fashion store can use AR to allow customers to 'try on' clothes virtually before buying them. This experience not only makes customers more satisfied but also increases customer loyalty to the brand (Van den Poel & Buckinx, 2005).

Overall, the role and influence of AI in digital marketing is enormous, covering various aspects from campaign effectiveness to improving the customer experience. With the continuous development of AI technology, digital marketing is expected to become smarter and more targeted, offering many opportunities for companies to grow and compete in the global marketplace.

### **Transformation from SEO to AI-Based Personalisation**

As digital technology evolves, the way companies interact with their audiences is also undergoing significant changes. One of the most striking shifts in recent years has been the transition from traditional Search Engine Optimisation (SEO) to AI-Based Personalisation. For years, SEO has been the main pillar of digital strategy, helping websites achieve better rankings in search engines. However, with the advancement of artificial intelligence (AI), new, more personalised and data-driven approaches are starting to replace previous optimisation methods (Mangold & Faulds, 2009).

SEO works by optimising website content and structure to ensure they are easy to find and relevant to users searching for information. Techniques such as the use of keywords, meta tags, and backlinking have long been the cornerstone of SEO. Although SEO remains relevant, the challenge that arises is in meeting users' increasingly high expectations for results that are more suited to their needs. This is where AI comes in and offers a more sophisticated solution (Parasuraman, 2000).

AI-Based Personalisation uses analytical data and machine learning to deeply understand user behaviour and provide customised content. AI algorithms can track user interactions with websites, analyse behaviour patterns, and predict their needs or wants more accurately. This allows companies to deliver the right message at the right time, providing a more personal and relevant experience for each individual (Chaffey & Ellis-Chadwick, 2019).

This transformation does not mean that SEO is completely abandoned, but rather that SEO acts as a foundation reinforced by AI technology. AI facilitates the collection and analysis of large amounts of data, which enables better decision making in SEO strategies. For example, AI can help determine which keywords are most effective, identify consumer trends, and suggest real-time content adjustments to be more relevant to specific audiences (Yadav, 2010).

The main advantage of AI-Based Personalisation is its ability to increase user engagement and conversions. A personalised experience tends to be more appealing to users, which then increases the likelihood of them engaging more deeply and ultimately making a purchase or other conversion. In addition, by providing a

personalised experience, companies can build stronger relationships and brand loyalty with their audience (Shi et al., 2020).

Despite its great potential, there are challenges to be faced in the implementation of AI-Based Personalisation. One of the main challenges is to ensure that the data used is accurate and in accordance with user privacy. In addition, companies need to have a capable technological infrastructure and a skilled team to manage and implement this AI technology. However, with continuous developments in the fields of AI and machine learning, the future of AI-based personalisation looks very promising, offering new and more effective ways to engage with consumers in a dynamic digital world (Edelman & Heller, 2015).

Overall, the transformation from SEO to AI-based personalisation represents a natural evolutionary step in digital strategy. By combining the power of traditional SEO with artificial intelligence, companies can create more dynamic and relevant user experiences. Although there are challenges to overcome, advances in technology and data analytics offer vast opportunities to increase user engagement and loyalty in the long term.

## **Conclusion**

The evolution of digital marketing shows a major transformation from traditional techniques such as SEO (Search Engine Optimisation) to modern strategies driven by AI (Artificial Intelligence) and personalisation. In the beginning, digital marketing revolved around search engine optimisation to increase visibility on the internet. SEO plays an important role in ensuring that content can be found by users, through the use of appropriate keywords, backlinks, and site structure.

Along with technological developments, digital marketing is undergoing a revolution towards an increasingly data-driven and more personalised approach. Data analysis allows marketers to understand user behaviour in greater depth and provide more accurate insights into consumer preferences. Sophisticated analytics tools enable companies to not only reach the right audience, but also measure the effectiveness of their campaigns in real-time, so that strategies and tactics can be adjusted as quickly as possible for optimal results.

Today, the use of AI in digital marketing is increasingly common and is key to a strategy of personalising content for users. AI technology can process large amounts of data and identify patterns that would be impossible for humans to see. This not only improves efficiency but also enables a more personalised experience for consumers. Companies can now provide more relevant product recommendations, individually tailored content, and more human-like communication through AI-powered chatbots. Digital marketing today and in the future is likely to continue to evolve with the integration of more innovative technologies to meet increasingly complex and dynamic consumer expectations.

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