

**A LOOK AT SALES AND EMAIL MARKETING PERSONALIZATION WITH
ARTIFICIAL INTELLIGENCE**

**UM OLHAR SOBRE AS VENDAS E A PERSONALIZAÇÃO DO E-MAIL
MARKETING COM INTELIGÊNCIA ARTIFICIAL**

**UNA MIRADA A LAS VENTAS Y A LA PERSONALIZACIÓN DEL EMAIL
MARKETING CON INTELIGENCIA ARTIFICIAL**

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ABSTRACT

This study investigates how Artificial Intelligence (AI) applied to email marketing personalization impacts sales and customer engagement. The research, of a qualitative nature, is based on bibliographic analyses and recent studies on the use of AI in digital marketing. The results show that the technology enables large-scale personalization, allowing messages to be segmented according to consumer behavior and preferences. This approach increases open, click, and conversion rates while strengthening the relationship between brands and customers. It was also observed that intelligent automation optimizes the time and resources of marketing teams, making campaigns more efficient and profitable. However, challenges related to implementation costs and the need for qualified professionals were identified. It is concluded that integrating AI into email marketing represents a competitive advantage, enabling more personalized, strategic, and humanized communications that enhance commercial performance in the digital environment.

Keywords: Artificial Intelligence. E-mail Marketing. Personalization. Sales.

RESUMO

O estudo investiga como a Inteligência Artificial (IA) aplicada à personalização de campanhas de e-mail marketing impacta as vendas e o engajamento dos clientes. A pesquisa, de natureza qualitativa, baseia-se em análises bibliográficas e estudos recentes sobre o uso de IA no marketing digital. Os resultados evidenciam que a tecnologia possibilita personalização em larga escala, permitindo o envio de mensagens segmentadas de acordo com o comportamento e as preferências do consumidor. Essa abordagem aumenta as taxas de abertura, cliques e conversões, além de fortalecer o relacionamento entre marcas e clientes. Observou-se também que a automação inteligente otimiza o tempo e os recursos das equipes de marketing, tornando as campanhas mais eficientes e rentáveis. Contudo, destacam-se desafios relacionados aos custos de implementação e à necessidade de profissionais qualificados. Conclui-se que a integração da IA ao e-mail marketing representa um diferencial competitivo ao permitir comunicações mais personalizadas, estratégicas e humanizadas, impulsionando resultados comerciais no ambiente digital.

Palavras-chave: Inteligência Artificial. E-mail Marketing. Personalização. Vendas.

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RESUMEN

El estudio investiga cómo la Inteligencia Artificial (IA) aplicada a la personalización de campañas de email marketing impacta las ventas y el compromiso de los clientes. La investigación, de naturaleza cualitativa, se basa en análisis bibliográficos y estudios recientes sobre el uso de la IA en el marketing digital. Los resultados evidencian que la tecnología permite una personalización a gran escala, posibilitando el envío de mensajes segmentados de acuerdo con el comportamiento y las preferencias del consumidor. Este enfoque aumenta las tasas de apertura, clics y conversiones, además de fortalecer la relación entre marcas y clientes. También se observó que la automatización inteligente optimiza el tiempo y los recursos de los equipos de marketing, haciendo las campañas más eficientes y rentables. No obstante, se destacan desafíos relacionados con los costos de implementación y la necesidad de profesionales cualificados. Se concluye que la integración de la IA en el email marketing representa un diferencial competitivo al permitir comunicaciones más personalizadas, estratégicas y humanizadas, impulsando los resultados comerciales en el entorno digital.

Palabras clave: Inteligencia Artificial. E-mail Marketing. Personalización. Ventas.

1 INTRODUCTION

With the advancement of digital transformation, it has redefined the forms of communication between companies and consumers, requiring smarter and more targeted marketing strategies. In this context, email marketing remains one of the most effective tools in digital marketing, accurately measuring results, great potential for personalization and offering a low cost. However, the sheer volume of generic messaging has reduced user engagement, which drives organizations to seek more sophisticated, customer-centric alternatives.

The integration of Artificial Intelligence (AI) in this context marks a significant advance in digital marketing strategies. As SafetyMails (2023) highlights, AI makes it possible to analyze consumer behavior on a large scale, understand patterns of interest, and predict future actions based on data collected in real time. In this way, campaigns are shaped according to the individual preferences of each user. This level of personalization makes content more relevant and increases the chances of conversion, transforming email marketing into a strategic customer relationship channel and sales driver.

In addition to the ability to analyze data, AI increases the operational efficiency of campaigns. According to HubSpot (2024), intelligent algorithms can automatically define the best sending time, test different subject versions, and adapt the message according to the audience's profile. This automation not only saves time but also improves the overall performance of campaigns, since each step is adjusted based on actual metrics and results, it enhances the user experience and boosts business results.

In the face of the advancement of digital technologies and the growing adoption of Artificial Intelligence in marketing strategies, the problem arises of understanding how the application of AI in the personalization of email marketing campaigns influences sales and customer engagement, considering its impacts on the effectiveness of actions and the consumer experience. The overall objective is to understand how personalization, supported by smart technologies, contributes to the effectiveness of digital strategies and to the strengthening of the relationship between brands and consumers. To this end, the specific objectives are: 1) to identify the main techniques for personalizing email marketing with AI support; 2) analyze cases of companies that have implemented AI in their campaigns; 3) evaluate the impacts of personalization with AI on open rates, click-throughs, and conversion into sales.

2 THEORETICAL FOUNDATION

2.1 ARTIFICIAL INTELLIGENCE IN DIGITAL MARKETING

Artificial Intelligence (AI) has been transforming the way companies relate to consumers, especially in digital marketing. Previously, strategies relied on broad segmentation and manual analysis of limited data. With AI, it is possible to analyze large volumes of information in real time, allowing campaigns to be more accurate, agile, and with the correct targeting.

In email marketing, AI offers resources to understand behavior patterns, identify buying preferences, and anticipate consumer needs. AI-powered tools can analyze browsing data, social media interactions, purchase history, and email engagement, providing insights that would be difficult to obtain with traditional methods alone. This analytics capability allows each campaign to be customized according to the user's individual profile, increasing the relevance of messages and the likelihood of conversion.

In addition, AI automates operational tasks such as setting sending times, testing different subject lines, and adapting content to audience characteristics. This automation saves time and resources, as well as ensuring that decisions are based on real data and results, making email marketing more efficient and strategic (Edrone, 2023).

Machine Learning (ML), one of the AI technologies, complements this process by allowing algorithms to learn from user behavior and automatically adjust campaigns. With this, it is possible to identify engagement patterns, predict which content is most likely to generate interaction and sales, and continuously improve digital marketing strategies (Fiapo, 2023).

The application of AI in digital marketing, especially in email marketing, goes beyond the automation of tasks. It represents a strategic transformation that combines data analysis, personalization at scale, and campaign optimization, delivering measurable results with increased engagement and strengthening the relationship between companies and consumers.

2.2 EMAIL MARKETING PERSONALIZATION WITH ARTIFICIAL INTELLIGENCE

The personalization of email marketing with the use of Artificial Intelligence (AI) represents one of the most significant advances in digital marketing. This technology allows companies to transform large volumes of data into highly segmented communications, making each message more relevant and strategic to the target audience. According to Topics

Magazine (2023), AI enables small, medium, and large companies to accurately analyze consumer behaviors and adapt their campaigns according to the profile of each customer, optimizing time and expanding results.

Among the main techniques used, predictive segmentation, intelligent automation, and the use of machine learning algorithms to generate personalized recommendations stand out. Predictive segmentation analyzes users' interaction history and identifies patterns of behavior, allowing them to predict future preferences and send tailored content. Intelligent automation, on the other hand, ensures that messages are sent at the most opportune time, using data such as opening time, location, and device type — factors that directly influence the engagement rate (Mackenzie, 2023).

Another relevant technique is the use of natural language processing (NLP), which enables the creation of messages that are more humanized and consistent with the brand's tone of voice. According to Fiapo (2023), NLP allows emails to be adapted to the recipient's communication style, making the content more attractive and emotionally effective. This ability to adjust the discourse is essential to strengthen the bond with the consumer and increase the chances of conversion.

In addition, one of the great advantages of AI is large-scale personalization. Unlike traditional methods, which required human time and effort to segment contact lists and craft personalized messages, AI tools can perform this process automatically and simultaneously for thousands of recipients. As pointed out by HubSpot (2024), technology allows companies to carry out personalized campaigns at scale, without compromising the quality or authenticity of communication. This scalability is critical for businesses that have a broad customer base and need to maintain the relationship consistently and efficiently.

Exame Magazine (2024) reinforces that the integration of AI into email marketing strategies provides significant gains in productivity and accuracy, as decisions are based on real data and not on assumptions. With this, companies are able to reduce costs, optimize resources and achieve superior results in less time. This operational efficiency is one of the reasons why AI has become indispensable in modern digital marketing strategies.

In summary, personalization techniques based on Artificial Intelligence enable more assertive, dynamic, and scalable communication. Through data analysis, automation, and the ability to continuously learn, companies are able to better understand the behavior of their customers and offer increasingly personalized experiences. This combination of technology

and strategy transforms email marketing into a powerful tool not only for engagement, but also for generating value and increasing sales.

2.3 IMPACTS OF ARTIFICIAL INTELLIGENCE EMAIL MARKETING PERSONALIZATION ON SALES

The application of Artificial Intelligence (AI) in email marketing has been consolidated as one of the most effective strategies to boost sales and strengthen the relationship between brands and consumers. With the increased use of intelligent algorithms and more investments in this area, it allows companies to analyze behavioral data, purchase history, preferences, and browsing patterns, enabling more targeted and personalized communication. According to Fiapo (2023), this ability to adapt content to the individual needs of each customer has significantly increased engagement and sales conversion rates.

According to SafetyMails (2023), personalized campaigns with the support of AI have open rates up to 30% higher than traditional ones, in addition to a higher click-through rate and positive responses. This is because the customer perceives the content as relevant and aligned with their interests, which builds trust and increases the likelihood of purchase. This personalization goes beyond the simple use of the recipient's name, ranging from precise audience segmentation to defining the best time to send and the type of language that generates the most return.

HubSpot (2024) reinforces that AI plays an essential role in optimizing digital marketing strategies, allowing companies to automate repetitive tasks and focus their efforts on strategic decisions. This automation, in addition to reducing operational costs, increases the return on investment (ROI) by targeting campaigns only to segments with the highest conversion potential. Thus, email marketing becomes not only a communication tool, but an efficient and measurable sales channel.

Another relevant point is the impact of AI on building lasting relationships with customers. According to Edrone (2023), platforms that use machine learning can identify patterns of behavior and predict future needs, suggesting products in an intelligent and timely manner. This type of recommendation increases the average ticket and encourages repurchase, strengthening the bond between consumer and brand. In the long run, this contributes to loyalty and the consolidation of a recurring customer base, which is one of the most important pillars for the sustainable growth of companies.

In addition, AI allows for more detailed tracking of results, providing accurate metrics on opens, clicks, conversion rate, and engagement. This data makes it possible for companies to make continuous adjustments and improve their strategies based on real evidence. According to Fiapo (2023), this process of constant learning generates more effective campaigns aligned with the dynamic behavior of the digital market.

It can be said that the personalization of email marketing with the use of Artificial Intelligence represents a significant advance in commercial strategies. By combining predictive analytics, automation, and personalization, companies are able to not only increase their sales but also provide unique experiences to consumers. This technological integration shows a change in the role of digital marketing, which is no longer just a dissemination tool and starts to act as an essential element in the purchase journey and customer loyalty.

3 METHODOLOGICAL PROCEDURES

This work adopts a qualitative approach, seeking to understand how Artificial Intelligence has been applied in the personalization of email marketing campaigns and how this practice impacts sales and customer engagement. The research is based on academic studies, reports and recent publications on the topic.

Qualitative research is ideal for exploring how AI has been developing in marketing and how this technology is applied. Sources published between 2020 and 2024, including articles and reports, were analyzed. These materials cover personalization techniques, intelligent automation, and the use of machine learning algorithms in digital marketing campaigns.

The study is limited to the context of digital marketing, focusing on companies that use AI to personalize their communications and optimize business results. Among the limitations, the scarcity of specific quantitative data on the impact of AI on email marketing campaigns in the Brazilian scenario stands out, due to the recent and dynamic nature of the topic.

Despite these constraints, the research allows us to consistently understand how the integration of AI and large-scale personalization transforms email marketing into a strategic tool for increasing sales and strengthening customer relationships.

4 RESULTS AND DISCUSSION

The analysis of the sources consulted shows that the application of Artificial Intelligence in the personalization of email marketing generates significant impacts on the performance of campaigns and commercial results. Recent studies show that personalized campaigns obtain higher opening and click-through rates when compared to other traditional strategies, reinforcing that content directed to the user's profile increases engagement.

The use of AI in each message allows it to be automatically adjusted, considering the user's past behavior, preferences, and history of interactions. Smart tools analyze browsing data, past purchases, and email engagement, enabling behavior prediction and more accurate segmentation. This makes the email marketing strategy more relevant in the messages, with the increase in the conversion rate and strengthening the relationship with the customer, making them feel more special and connected.

In addition, the automation provided by AI offers significant operational benefits, allowing you to manage campaigns at scale without loss of personalization. The possibility of scheduling sending, testing subject lines, and adapting content dynamically contributes to time optimization, cost reduction, and maximization of return on investment (Exame, 2023; FT Magazine, 2023).

The results also indicate that personalization directly influences the purchase decision process. Messages that adjust to the customer's moment in the sales funnel, or that offer products and promotions according to individual preferences, tend to generate faster interactions and a higher conversion rate. In addition, the personalized experience strengthens brand loyalty, promoting repurchase and increasing the average ticket (Nicole Borges Raupp, 2023; Seven, 2023).

On the other hand, some challenges were identified, such as the costs of implementing the technology and the need for qualified professionals to operate the AI tools. However, the benefits outweigh the limitations and challenges, showing that companies that invest in AI-supported email personalization achieve consistent results in both engagement and sales (Fiapo, 2024; HubSpot, 2024).

The application of AI in email marketing transforms it into a strategic tool, capable of generating measurable results, optimizing resources, improving the user experience, and strengthening the relationship between companies and customers, consolidating itself as a competitive advantage in an increasingly data-driven market.

5 FINAL CONSIDERATIONS

The purpose of this study was to explore how Artificial Intelligence applied to email marketing personalization can influence increased sales and customer engagement. The qualitative research allowed a deeper understanding of the impact of this technology on digital marketing strategies, analyzing perceptions, results and benefits generated by the use of intelligent tools in communication between companies and consumers.

The results of this study demonstrated that the application of AI contributes significantly to the improvement of campaigns, allowing for large-scale personalization without losing the individual relevance of messages. This ability to segment audiences and adapt content in an automated way is reflected in increased open rates, clicks, and conversions, optimizing marketing teams' time and resources, and strengthening the relationship between brand and customer.

The need for a critical analysis in relation to the obstacles that arise during the implementation of AI was also highlighted, such as initial costs, integration with existing systems, and the requirement for trained professionals to operate the tools. These challenges, although present, do not diminish the transformative potential of the technology, but reinforce the importance of planning and qualification in the adoption of these solutions.

One of the limitations of this work is the fact that it was based mainly on bibliographic references and secondary studies, which restricts the observation of practical results in real business contexts. Future research can deepen the analysis with case studies or empirical data collection to further validate the effects of intelligent personalization on sales.

In this way, it can be concluded that the integration of Artificial Intelligence into email marketing represents a significant advance in digital communication practices. Technology proves to be a strategic ally by allowing the creation of personalized, efficient, and humanized experiences, becoming a competitive advantage for companies seeking to strengthen their relationships with the public and expand their business results in the digital environment.

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