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### RESEARCH

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# THE IMPORTANCE OF ARTIFICIAL INTELLIGENCE IN MARKETING PROCESS COMMUNICATIONS

# La Importancia de la Inteligencia Artificial en las Comunicaciones en los procesos marketing

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# **ABSTRACT**

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These days it is no longer unusual to talk about marketing, and what is involved in its use within organizations, we know that it deals with every possible interaction between companies and people, and why not say it, marketing allows achieve organizational objectives by creating increasingly adaptable and intelligent experiences for customers, for this it is necessary to deploy three types of capabilities: creative, analytical and technological, in the use of these capabilities is where employment intervenes of artificial intelligence; the correct application of this, allows the optimization of resources and reduction of costs; but above all it has a transcendental impact for clients, since it makes it easier to anticipate their needs and offer solutions to them, even before they look for them through predictive analysis; or, using cookies, deep learning techniques and the use of chatbot, data can be obtained from various sources of information to create advertising content that is as personalized as possible. This article aims to carry out an exhaustive bibliographic review on this subject, based on information that has been published in scientific databases, which allows obtaining a reference framework on the importance of the use

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of artificial intelligence in marketing, which affirms that the use of AI in current marketing is vital for the evolution, adaptability and survival of organizations in this new world of digital transformation 4.0.

**Keywords:** marketing, artificial intelligence, AI, digital marketing.

### **RESUMEN**

En estos días ya no es inusual hablar de marketing, y que es lo que conlleva el empleo del mismo dentro de las organizaciones, sabemos que se ocupa de cada interacción posible entre las empresas y las personas, y por qué no decirlo, el marketing permite alcanzar los objetivos organizacionales por medio de la creación de experiencias cada vez más adaptables e inteligentes para los clientes, para ello es necesario el despliegue de tres tipos de capacidades: creativas, analíticas y tecnológicas, en el uso de estas capacidades es donde interviene el empleo de la inteligencia artificial; la correcta aplicación de esta, permite la optimización de recursos y disminución de costes; pero sobre todo tiene un impacto transcendental para los clientes, ya que facilita el anticiparnos a las necesidades de ellos y ofrecer soluciones a las mismas, inclusive antes de que ellos las busquen mediante el análisis predictivo; o, empleando cookies, técnicas Deep learning y el uso de chatbot, se puede obtener información valiosa sobre los clientes, sus preferencias y comportamientos para crear contenido de publicidad lo más personalizada posible. Este artículo pretende realizar una exhaustiva revisión bibliográfica sobre esta temática, teniendo como base información que han sido publicadas en bases de datos científicos, que permitan obtener un marco de referencia sobre la importancia del empleo de la inteligencia artificial en el marketing, que afirme que el uso de IA en el marketing actual es vital para la evolución, adaptabilidad y supervivencia de las organizaciones en este nuevo mundo de transformación digital 4.0.

**Palabras clave:** marketing, inteligencia artificial, IA, marketing digital.

# A importância da inteligência artificial no processo de comunicação do marketing

#### **RESUMO**

Hoje em dia já não é invulgar falar de marketing, e do que está envolvido na sua utilização dentro das organizações, sabemos que se trata de todas as interacções possíveis entre empresas e pessoas, e porque não dizê-lo, o marketing permite alcançar objectivos organizacionais através da criação de experiências cada vez mais adaptáveis e inteligentes para os clientes, o que requer a implantação de três tipos de capacidades: Na utilização destas capacidades é onde intervém a utilização da inteligência artificial; a sua correcta aplicação permite a optimização dos recursos e a redução de custos; Mas, acima de tudo, tem um impacto transcendental nos clientes, pois facilita a antecipação das suas necessidades e oferece-lhes soluções, mesmo antes de as procurarem através da análise preditiva; ou, utilizando cookies, técnicas de aprendizagem profunda e a utilização de chatbots, podem ser obtidas informações valiosas sobre os clientes, as suas preferências e comportamentos, a fim de criar conteúdos publicitários tão

personalizados quanto possível. Este artigo tem como objectivo realizar uma revisão exaustiva da literatura sobre este tema, com base em informação publicada em bases de dados científicas, o que nos permite obter um quadro de referência sobre a importância da utilização da inteligência artificial no marketing, que afirma que a utilização da IA no marketing é hoje vital para a evolução, adaptabilidade e sobrevivência das organizações neste novo mundo da transformação digital 4.0.

**Palavras chave**: marketing, inteligência artificial, inteligência artificial, IA, marketing digital.

### 1. INTRODUCTION

Nowadays, there is intense competition among different organizations, making it relevant and essential for them to employ various technologies in order to achieve the desired effect among their potential clients or consumers. These technologies mainly consist of a network of interconnected devices or computer applications, such as social networks, CRM, web analytics tools, IoT, mobile applications, and more. They allow for the analysis of a large amount of information without direct human intervention. These networks of information or machines capable of generating this type of analysis can be considered artificial intelligence, or in other words, artificial intelligence (AI) allows devices to imitate and even surpass certain cognitive functions that are inherent to humans and that we use for perception, reasoning, learning, and problem-solving. In this sense, and in summary, AI is capable of processing and analyzing large amounts of data, making precise decisions based on patterns, and automating complex processes, providing companies with a competitive advantage in the market.

Based on the benefits provided by these technological tools, organizations can study and analyze the different customer relationships in order to modify the services and products offered based on their specific and specialized preferences and needs (Salazar-García, 2020). Therefore, according to Sánchez-Monasterio and Casaburi (2018), with the advancement of smart machines and their precise and accurate contribution to strategic decision-making, it is essential to think about a re-think and re-work traditional marketing. That is why this research aims to analyze the existing literature on the proposed topic, with the purpose of establishing an objective and realistic approach to the importance of employing artificial intelligence in marketing. Above all, it seeks to establish a new vision of how the traditional marketing approach evolves directly alongside new technologies, particularly in this era corresponding to the fourth industrial revolution.

# 2. OBJECTIVES

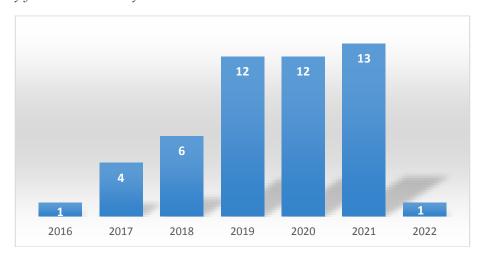
- Analyze the importance of implementing artificial intelligence in marketing based on the concepts proposed in various bibliographic sources such as scientific articles, books, technical reports, doctoral theses, and other documents related to the topic at hand.
- Examine the benefits involved in using artificial intelligence in marketing according to the different bibliographic sources found.

### 3. METHODOLOGY

The study methodology employed in this research is based on an inductive and deductive process, supported by the review of literature in freely accessible scientific databases such as Google Scholar, Dialnet, and ResearchGate, spanning from the year 2017 to 2022. The following keywords were used: marketing, artificial intelligence, digital marketing, business intelligence, marketing 4.0, prediction, big data, ecommerce, digital transformation, recommendation systems, programmatic advertising, automation, personalization, smart data, multiplatform, digital, machine learning, information quality, and chatbots.

A total of forty-nine sources were used as references, including scientific articles and books within the specified time period, as illustrated in the following graph.

**Figure 1**Distribution of years with revised references.



**Source:** Author's own work.

### 4. DISCUSSION

If there is one concept that is changing the way society interacts these days, it is the emergence of intense involvement of artificial intelligence in our lives on the global stage. Although it may appear to be a new concept, it actually originated in the mid-20th century. The purpose of this technology is to imitate or provide solutions to situations that cannot be naturally executed by human minds (Recuenco and Reyes, 2020). Artificial intelligence is reshaping the business environment and the functioning of organizations, and the COVID-19 pandemic has further accelerated this change rapidly. This technology can be considered one of the most important of our times as it has the ability to break paradigms of traditional processes and empower organizations that apply it correctly (Rouhiainen, 2021).

First and foremost, it must be clearly established what artificial intelligence is. Artificial intelligence can be defined as the emulation of human intelligence processes by machines. These processes encompass abilities such as voice or image recognition, semantic search, decision-making, and even automatic learning techniques (Devang et

al., 2019). A more detailed definition of artificial intelligence is the capacity of machines to utilize algorithms, learn from gathered information or data, and employ this learning to make decisions in a manner similar to humans. However, unlike human beings, machines do not require rest and have the ability to analyze enormous volumes of data simultaneously. Moreover, the margin of error in such analysis is minimal and therefore significantly lower compared to what a human would achieve (Rouhiainen, 2018). Similarly, artificial intelligence also refers to the general idea that computers, through the use of various algorithms, can think and perform tasks in a similar way to humans. Additionally, it has the capability to actively model human lifestyle through personalization, continuous learning, and behavior that approximates human thinking. It focuses on data analysis and decision-making (Kumar et al., 2019).

The objective of AI is for computers to perform the same tasks as the human mind, and as such, they possess psychological competencies such as perception, prediction, planning, association, and motor control, which enable humans to achieve their intended goals (Boden, 2017). Under this premise, we can assert that, just as the human mind possesses characteristics that facilitate the attainment of personal goals, artificial intelligence is a fundamental pillar in achieving business goals and serves as a competitive advantage. In this sense, AI currently represents one of the most widely used expressions in the business world because it has proven to be a powerful tool for various applications in the business sphere, particularly in marketing. While artificial intelligence has been present for decades, its recent popularity is based on three main factors: the increase in big data, the availability of inexpensive and scalable computing equipment, and the development and implementation of new techniques that enable its utilization (Overgoor et al., 2019).

**Table 1** *Approach to concepts related to artificial intelligence.* 

Concept	Definition
Big Data	A large volume of data that requires advanced analytics, automated learning, and cloud computing systems.
Chatbot	Automatic programs with which humans interact through auditory or textual means, using algorithms to process the data and determine an appropriate response, typically through a chat platform.
Virtual Agents	Automatic programs with which humans interact through auditory or textual means, using algorithms to process the data and determine an appropriate response, typically through a chat platform.
Virtual Assistants	It is a digital assistant that responds to voice commands and has the ability to perform multiple tasks. Examples include Apple's Siri, Amazon's Alexa, Microsoft's Cortana, and Google Now.
Robots	They are automated machines that can be programmed to perform a series of actions, movements, or tasks with the purpose of providing services similar to humans.

Blockchain	It is one of the decentralized information technologies that constitute a peer-to-peer distributed network, which stores immutable records of information or data blocks over time.
Drones	They are unmanned aerial devices capable of flight and are programmed to utilize machine learning or machine learning techniques.
Internet of Things: IoT	It can extend the connectivity of devices such as security systems and electrical appliances, enabling them to send and receive information through the network.
Smart devices	These devices can connect to others in networks and can communicate and interact with each other using various wireless protocols such as Wi-Fi or Bluetooth technology, operating in an interactive manner.
Machine Learning	It is also known as "aprendizaje automático" in Spanish and refers to the utilization of artificial intelligence using algorithms or data that enables computing devices to learn a specific task without the need for explicit programming.
Deep Learning	It constitutes a subset of machine learning in artificial intelligence that emulates how we learn based on experience, using algorithms related to the structure and functionality of the human brain
Neural networks	These networks use algorithms and computational systems to simulate the human brain. This system learns to perform tasks without any specific rules.

Source: Adapted from Cuervo Sánchez (2021).

In the past 5 to 10 years, the interest in the relationship between AI and marketing, particularly in consumer goods operations, has gained renewed momentum. While radical changes are often discussed, they are no longer limited to marketing decisions but encompass a wide horizon (Grandinetti, 2020). The rise of artificial intelligence in marketing has not occurred in isolation but is closely tied to the rapid advancement of technology, including frontline operations, contact centers, and resource management. This progress contributes to the deployment of AI in marketing by automating various aspects of commerce and generating data that can be used to support artificial intelligence (Stone et al., 2020).

In the current times, consumers remain informed and do not follow a linear buying cycle. Therefore, marketing strategies need to captivate them without interrupting their experience. For this reason, it is crucial for businesses to make informed decisions in order to maximize their organizational potential. When it comes to the marketing of products and services, it is necessary to employ analytical tools that integrate multiple objective and efficient functions to facilitate customer resolution and satisfaction (Zamora et al., 2017). It is paramount to understand that marketing strategies should be based on the learning derived from customer preferences in order to make them more accurate each day and aligned with the most appealing aspects of the markets, ultimately achieving greater credibility (Mercadé-Melé et al., 2017). It is evident that by using artificial intelligence in the marketing department through various communication channels, a more personalized and intimate connection with the customer can be established compared to past eras. This allows for effective

segmentation, which enables the use of artificial intelligence to be considered a form of direct marketing since each customer can be impacted individually (Abashidze and Dąbrowski, 2016).

According to Martínez Ortega and Medina Chicaiza (2020), in today's business landscape, the creation of added value and the ability to deliver new experiences to consumers or potential customers through artificial intelligence have become determining factors that generate a competitive advantage for companies. They also emphasize that implementing AI in businesses is possible through various elements such as machine learning, natural language processing (NLP), visual or text recognition, big data, deep learning, cloud computing, and the Internet of Things (IoT). All of these elements should be integrated into the company's value chain. Furthermore, they state that AI technologies applied to marketing transform the interaction with customers, with a focus on designing competitive strategies to personalize products or services and predict consumer behavior.

In this regard, we have Yeğin (2020), who points out that thanks to these concepts related to artificial intelligence, organizations that adopt them in their marketing strategies are able to predict consumer preferences and orientations. Additionally, they can study consumer purchasing behavior, which leads to predicting future actions that customers may take in this regard.

Large and even medium-sized companies have intensified and increased the use of machine learning, which is defined as a type of artificial intelligence or cognitive technology that allows systems to learn and improve the consumer experience through exposure and analysis of data without explicit programming. In other words, it does so autonomously (Sainz de Vicuña, 2020). Artificial intelligence applied to marketing, through the use of machine learning, acts as an assistant that draws on information flow from inherent big data tools and analyzes it to achieve ideal and intelligent segmentation and optimal categorization of different leads. By structuring data efficiently and clearly, artificial intelligence becomes an essential tool for marketing and enhancing the consumer experience (Amor-Bravo, 2019).

Currently, along with machine learning, Deep Learning could be seen as the tip of the iceberg of artificial intelligence (Sainz de Vicuña, 2021). The concepts of artificial intelligence, machine learning, and deep learning will be increasingly used to enhance marketing strategies and bridge the gap between supply and demand. We are currently experiencing a revolution driven by the various perspectives surrounding technology, and this situation will have a profound impact as it connects fully autonomous devices or equipment with others that still require human intervention. They will have the ability to exchange information for the benefit of different industry sectors, ranging from smart homes to the creation of automated entities that facilitate human work (Nguyen and Simkin, 2017).

From the perspective of machine learning and artificial intelligence, campaigns under A/B testing schemes utilize robots that can combine texts and images based on multiple attributes to evaluate the traction of a message. It is not uncommon for

behavior management models to use persuasive structures that are programmed for a device to organize different images, voices, and texts around a story within a specific mental framework. This greatly facilitates the different elements of marketing within a campaign targeted toward customers or consumers (Edwards, 2020).

Indeed, phenomena like machine learning have multiple implications in various fields, including digital marketing. An example of this is the proliferation of virtual assistants. These types of services started by being incorporated into mobile phones and have now extended to our homes through more advanced and evolved versions. The increased utilization of these services has several implications inherently related to online marketing, such as search engine positioning. All these circumstances reflect that society has become permanently connected to the Internet (Markuleta-Arrula and Errandonea-Sistiaga, 2020).

It can be determined that artificial intelligence employed in marketing is primarily established through the use of the following functionalities: predictive analysis, customer relationship management (CRM), and digital advertising.

# Predictive Analysis:

Starting from predictive analysis to automated learning, the potential of utilizing AI for data-based organizational decision-making and business strategies cannot be underestimated under any circumstances (Arenal-Laza, 2019). Given that organizations need to collect data and information before, during, and after the execution of marketing campaigns or projects in order to establish cause-effect relationships that demonstrate the economic benefit of both sales and marketing, all the necessary information must be established to exemplify these relationships. To achieve this, the data must be notable, and additionally, they need to be collected within an influential timeframe through a methodology that validates their authenticity and accuracy. This data can be gathered from real interactions, behaviors, or relationships (Turletti, 2018).

In this data analysis process, AI intervenes as an optimal tool. One application of predictive analysis is making predictions based on data obtained from CRM or customer relationship management. Through this data, marketing objectives can be established, such as creating new campaigns, providing services that may be required by customers, or identifying strengths and weaknesses in the organization's advertising. These analyses provide valuable information about customer satisfaction, allowing for the possibility of preventing customer churn or increasing customer satisfaction, which translates into benefits for the company in the short or long term (Castillo-Romero, 2019).

For this purpose, the combination of statistical data and data mining algorithms is employed. The objective is to store enormous amounts of data and information and, through the use of expert systems based on artificial intelligence, predict or forecast future habits and behaviors of consumers or customers. To achieve this, past patterns of behavior are analyzed and exploited, combining comprehensive customer behavior

information and historical data to identify potential opportunities or risks. The goal is to identify patterns in order to construct models. Once the model is built, relevant predictions can be made (Ostos-Mota, 2021).

By employing artificial intelligence, organizations can estimate whether a new product or service with specific characteristics is likely to succeed using a predictive algorithm. In this way, marketing professionals can save many steps in the development of new products or services. In most cases, these predictions are more accurate than retrospective market studies and generate information much faster than concept testing (Kotler et al., 2022).

For example, predictive scoring is a function that calculates the probability of customers interacting with emails sent by organizations, the likelihood of them discontinuing a service, or making an online purchase. In other words, its objective is to measure the quality of relationships and anticipate customer behavior. Another technique is predictive customer segmentation, where AI software identifies segments of customers with similar behavioral patterns. This allows organizations to focus engagement strategies on these identified segments rather than analyzing each case individually. Lastly, there is the optimization of omnichannel deliveries, which involves using AI to schedule information deliveries through the most appropriate channels and at optimal times when customer response probabilities are high. This streamlines the sales process and maximizes the impact of communications with customers during the most suitable contact hours (Amor-Bravo, 2019).

In other words, predictive analysis using AI utilizes information and data to forecast actions that increase the likelihood of achieving optimal and improved results. It also enables new operational approaches that help us reach our business goals. It provides suggestions on how to leverage future opportunities or mitigate potential risks and shows the consequences of each decision made. This allows us to determine the optimal decisions for optimizing organizational processes. In this sense, various sources have predicted that organizations will allocate significant percentages of their resources to the design and development of this type of analytics, as seen in examples like recommendation systems used by applications such as Spotify or Netflix (Joyanes-Aguilar, 2021).

Customer Relationship Management (CRM): The relationship between customers and business organizations can be complex. A customer can be a satisfied potential buyer of a product or service, but they can also be an unsatisfied customer making a complaint or return. There are recurring and occasional customers. Customers can contact an organization through multiple channels, including in person, via telephone, email, or even WhatsApp. They may request a quote through a web form and then make a phone call to clarify a related aspect. Multiple employees from various departments and through various channels may contact a customer to follow up on an issue. CRM manages all these factors in a unified manner or, in other words, it manages all possible channels of customer interaction. CRM systems are a set of tools that facilitate access to and analysis of information and data in order to extract knowledge derived from them. They also allow for personalized configuration of customer

relationships, separate from conventional marketing models. (Paniagua-Martín, 2021). CRM systems streamline the management of customer relationships by providing a comprehensive platform for storing and accessing customer information, analyzing customer data, and facilitating personalized interactions and engagement (Pereda-Marín and Berrocal, 2018).

Traditionally, customer relationship management (CRM) is a process through which organizations efficiently manage relationships and interactions with their customers, suppliers, or vendors. However, this view can be surpassed through the use of artificial intelligence (AI) as AI-based platforms integrate multiple marketing and commercialization tools. Specifically, these platforms are now referred to as customer experience management platforms. These platforms enable understanding and interpretation of customers, facilitating the implementation of interrelated strategic plans focused on improving loyalty, promotion, and satisfaction. Examples of such platforms are Adobe's Adobe Customer Experience Management Cloud and Oracle's Oracle Customer Experience Cloud Cx. An AI-based CRM software system automates real-time processes such as collecting customer data from multiple platforms or channels, automating customer service, sales, and marketing processes, tracking potential customers throughout their buying journey, and identifying opportunities to increase revenue through cross-selling (selling different products from the organization's portfolio) or upselling (selling upgraded or premium versions of the same product) (Villaseca-Morales and González-Pérez, 2021).

The true power of a CRM is achieved when marketing campaigns and different stages of the sales process are combined. All information must be collected and prepared for analysis. For example, if coupons have been distributed in a specific geographic area, this should be noted. If contact has been made through social media, it should also be considered. The important thing is that all this information should not be lost because it can help determine that a certain customer is not the right fit, potentially resulting in their loss. Therefore, a CRM should consider each customer as an opportunity rather than just another contact in the database (Muñoz-Barros, 2020).

It has already been demonstrated that applications of artificial intelligence directly related to customer service and support have been developed specifically for digitization, automation, and advertising at various touchpoints. Many of these applications aim to gather information from language assistants and emerging robots. As a result, changes in current processes regarding the application of artificial intelligence have shifted towards self-diagnosis, which has led to the implementation of new products and services tailored to the specific needs of each customer or consumer (Jyng and Rubasundram, 2020). The new technologies of artificial intelligence, when directly applied in marketing, modify relationships and interactions with customers or consumers. This gives rise to a whole system focused on designing competitive strategies that have the ability to predict behaviors. The application of AI in marketing allows for the emergence of a new customer experience based on personalized services (Martínez-Ortega and Medina-Chicaiza, 2020).

In order to achieve the aforementioned goals, there have been multiple innovative developments in this field. AI-based software solutions are presented as operational tools that integrate online and offline channels within a single CRM system. These systems are designed to manage a large volume of users or customers through various channels, including traditional ones like email, chat, and SMS, as well as social media platforms such as Facebook, Twitter, Instagram, YouTube, Telegram, and WhatsApp. They provide intelligent reports tailored specifically to each user, allowing for immediate feedback. With these solutions, the entire customer service process on social media can be fully recorded, tracking each step of every comment made by customers regarding a particular brand, whether it's a request, inquiry, or review. The AI-based software transforms these comments into cases that are then assigned to a team member for follow-up until they are resolved (Bededetti, 2020).

Consequently, for an organization to succeed, it must employ greater intelligence, and this is where the utilization of AI-based CRM or customer relationship management comes into play. These systems enable marketing automation through digital capabilities, requiring top companies to be willing to modify the status quo and fully optimize their organizational resources related to marketing and sales across multiple channels (Bova, 2019).

Digital Advertising: Marketing in digital environments offers a range of tools that provide multiple benefits for organizations compared to traditional marketing tools, as the latter may not be able to promote certain situations or factors that digital marketing or digital advertising can. First and foremost, online marketing has the ability to work in real-time, allowing for optimal tracking of the effectiveness of online advertising campaigns based on instantly generated indicators. Additionally, the costs associated with digital advertising are generally lower than traditional methods. Finally, digital advertising has the advantage of leveraging technological tools commonly used by consumers, such as social media platforms, websites, and email (García-Mendoza et al., 2021).

Artificial intelligence technologies, through big data, enable the achievement of highly personalized advertising impacts. These advancements have allowed the creation of advertising messages that are relevant to the target audience within a precise time period and considering the location of the potential recipient, effectively optimizing advertising investment. Additionally, the interactivity that can be incorporated into advertising pieces transforms traditional advertising into a conversation. The ability to identify user profiles enables message and advertising personalization, providing the possibility of measuring advertising effectiveness in a more agile and almost immediate manner (Gonzáles-Oñate, 2019).

Digital advertising through artificial intelligence is an optimal process of planning, activation, purchasing, and optimization of digital campaigns. It also enables the connection of online advertising platforms with databases that allow for segmentation strategies with various types of profiles. To make this process possible, the interconnection of multiple technological platforms that perform various functionalities is of vital importance. This ecosystem, supported by AI, connects

advertiser brands with consumers of media content. The process begins with media outlets connecting their content servers to advertising server websites, which are used to make advertising spaces on websites available to users or consumers who want to commercialize them through programmatic platforms (Martínez et al., 2019).

The new digital advertising is based on artificial intelligence systems that automatically select the best advertising spaces for a campaign based on the segmentation established by the advertiser. However, in this model, there may be intermediary platforms called ad exchanges, whose function is to manage advertising spaces from multiple media and the advertising investment from various advertisers, deciding through automated processes which is the optimal model to be used. These platforms use large volumes of information and employ complex algorithms based on various criteria and learning processes. The benefits obtained from the application of these processes compared to others are: wide reach, significant segmentation possibilities, brand recall, and extensive remarketing opportunities (Markuleta-Arrula and Errandonea-Sistiaga, 2020).

Large platforms offer advertisers the ability to target suitable customers automatically without the need for an advertising salesperson. Additionally, the various tools for monitoring behavior have become so sophisticated and effective that automatic programmatic advertising is now the industry standard. There is an artificial intelligence-based tool called dynamic creative optimization that allows advertisers to maximize their content for the user and find the most receptive audience possible (Stengel, 2021). In other words, programmatic or digital advertising has become dominant on the internet, where advertisers pay for audiences rather than spaces; the primary goal is to reach as many people as possible, regardless of the number of ad spaces (Rodríguez-Fenández, 2021).

According to Jones (2018), the approach of different brands should be intrinsically related to the audience. For a conversation to be successful, its focus must be on an individual level between consumers and have high relevance to them. Therefore, it is essential to adapt and personalize services, content, and integrations in order to better satisfy the needs of a customer or consumer.

AI enables us to understand the desires or needs of customers in order to establish messages that will offer the best response and adapt them to their desires, resulting in highly personalized communication. Furthermore, AI turns social media into the most optimal channel for delivering brand content. It is worth mentioning that this artificial intelligence already allows us to plan and publish such content whenever we want and communicate it to those consumers or customers we want to reach, based on their preferences and needs. In the short term, the inclusion of AI in marketing and social media allows us to use consumer behavior to anticipate relevant communications and deliver advertising at the right moment (Silva-Guerra, 2021).

It is pertinent to consider that many users and customers are already digital natives and no longer respond to traditional advertising. These new users demand interaction, and this is where digital advertising comes into play, specifically virtual assistants such

as chatbots, which are used as a tool for direct contact with the consumer (Giráldez, 2021). The use of chatbots extends to personalized ads; all of this is possible due to the evolution of computer algorithms that modify the interaction between users and their devices. In the case of chatbots, they are computer programs with which one can have a conversation in order to request information or perform an action. One of their great advantages is that, unlike current applications, this type of software does not need to be downloaded or updated by the user. Additionally, chatbots, being AI technology, have the ability to learn about our needs, preferences, and tastes as they are used, including the ability to predict the user's possible requirements (Luque et al., 2018).

Chatbots are a novel form of artificial intelligence that has successfully replaced voicemail systems and virtual assistants, for example. They provide much more precise services to users or customers based on natural language recognition and the development of technologies related to machine learning. The continuous growth and improvement of AI allow for gathering all the information from a contact and storing it immediately to enhance the customer experience (Ramírez-Hauncher, 2019).

### 5. RESULTS

Finally, it can be established that despite the multiple and varied advantages discussed regarding the use of artificial intelligence technologies applied in marketing, it is important to consider that technology is now an integral part of everyone's life. Based on this, marketing professionals have an unprecedented opportunity to constantly seek market knowledge. To achieve successful implementation of technology, it must be done based on the customer and with the customer as the central focus. Nothing can be achieved by making technology the foundation of all our strategies, or in other words, making it the sole objective. On the contrary, technology should be understood only as a means or enhancer of all organizational efforts to ensure that the customer experience is distinctive, innovative, and creates long-term value (Martínez, 2021).

The combination of various technologies involving the use of artificial intelligence is transforming industries and establishing a new form of customer relationship. Experience and anticipation of customer needs have become key attributes in this new relationship. While these new technologies offer great opportunities for organizational growth, market positioning, and overall improvement of consumer experiences, it is important not to overuse the term "digital disruption." This term should be reserved for cases where a complete modification or disruption of the traditional business model is truly taking place. If we believe that we are achieving digital disruption when we are actually evolving our marketing model, it can lead us to a comfort zone that limits the exploration of genuinely disruptive opportunities and new markets. Incorporating a decision-making dynamic based on understanding new AI technologies, both internally and externally, and identifying new business models is a practice adopted by the most successful companies (Alcaide and Díez, 2019).

While it is true that in any emerging technology, there is a problem, and that is that, on the one hand, company directors are eager to adopt and use artificial intelligence, but many of them still do not have a specific and clear understanding of how it works

or the potential impacts on knowledge management that its use entails (Paschen et al., 2019).

It can be assured that the few companies that seek to carry out marketing activities without the inclusion of artificial intelligence are destined to gradually become obsolete, as artificial intelligence provides multiple benefits and increasingly facilitates market research and the utilization of the results obtained from such research. However, despite all these results achieved through the use of artificial intelligence, human interpretation is still necessary and required (Cuervo-Sánchez, 2021).

# 6. CONCLUSIONS

As identified based on the 49 sources included in this literature analysis, there are several advantages of implementing artificial intelligence in marketing. Therefore, as extensively discussed in this article, the importance and relevance of applying AI are vital for organizations that want to survive in the current business environment.

Integrating artificial intelligence into marketing relies on the application of a scientific model. This technology facilitates the identification of customer preferences and understanding the variability between supply and demand, thanks to data interpretation, where big data plays an essential and vital role. Artificial intelligence enhances the boundaries of traditional marketing and offers significant benefits, such as identifying the circumstances or motivations that drive consumer purchases. This enables product or service segmentation, customization, and adaptation to the specific and personalized interests of customers. It also helps determine the factors that influence a purchase, allowing for a more tailored approach to the personalized shopping experience. Furthermore, it promotes product innovation by identifying market trends and improves customer service processes by efficiently and effectively resolving customer issues. Additionally, it provides better recommendations based on data and the user's purchasing history.

One key to the success of artificial intelligence applied to marketing is personalization, which involves analyzing individual consumption patterns on a large scale. This allows for the segmentation of the chosen target audience and the design of exclusive campaigns based on their preferences. A personalized user experience is the central axis of customer loyalty. Another key aspect of AI application is in logistics and inventory management, where speed is crucial to maximizing current business returns. AI detects user consumption patterns and, through predictions and probability analysis, develops sales strategies that efficiently manage inventories, saving time and costs for organizations. Image recognition is another important factor that has made the implementation of artificial intelligence essential in organizations. It enables the identification of multiple visual characteristics of a product and relates them to other products with similar features. Many platforms utilize this technology, allowing consumers to compare photos of different items with those in their own catalog.

When it comes to the creation of automated and personalized content, artificial intelligence is indeed a major player. It is possible to train an electronic device through

specific software to deliver engaging and personalized content to users. By using artificial intelligence in content creation, different types of content can be combined and optimized, providing each consumer with a unique experience compared to others. All of this is achieved without human intervention. Once all the variables of customer information have been gathered using artificial intelligence, not only can personalized content be generated, but new content can also be created based on the specific information collected from each customer.

While the benefits of applying these technologies in marketing far outweigh the negative factors, there are aspects that need to be taken into account. One of them is depersonalization or dehumanization. The use of artificial intelligence in marketing strategies can lead to depersonalization in the communication between brands and potential customers. Consumers year after year demand that brands be more human, and brands currently respond by using chatbots. While not everything is negative, the future challenge for organizations is to ensure that these chatbots, which are aware of our behavior, purchasing patterns, and previous conduct, do not sound or write like machines whose goal is to sell us more products. On the contrary, they should utilize technology to fully satisfy our requirements and enhance our overall satisfaction.

Continuing with this line of analysis, while it is true that the implications of using artificial intelligence raise concerns about machines replacing humans, it should be considered that no matter how intelligent a machine or software may be, it cannot participate in aspects such as making creative decisions based on cultural variables. This is where the human mind prevails over artificial intelligence. It is true that machines and artificial intelligence can be mathematically and statistically 100% accurate, but it should not be forgotten that one of the fundamental axes that marketing analyzes through the use of artificial intelligence is human behavior. And as we know, human behavior evolves and changes in a way that cannot be predicted or quantified, as it has an unpredictable nature, even when there are trends or patterns of behavior.

Finally, it must be emphasized that artificial intelligence has come to the world of marketing to stay. Organizations can take advantage of all the benefits offered by technological advancements to improve their offerings, become more efficient in their processes, and be more effective in teamwork tasks. The marketing department of an organization can greatly benefit from incorporating this type of technology as it frees up time-consuming repetitive tasks such as competitor analysis or audience research. This allows the organization's human capital to dedicate more time to tasks that machines cannot perform, such as creativity and personal contact. It should be considered that artificial intelligence will never replace the direct relationship with the customer or consumer, but it can provide tools to know them better and personalize messages to them. Jobs in marketing will not disappear due to artificial intelligence, but they will need to evolve as these technologies are implemented on a larger scale. New tasks or jobs should be focused on creating more space to explore complex activities that bring greater value, particularly those related to personal contact for the benefit of the customer.

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