



# The Role OF Artificial Intelligence IN Personalized Marketing

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## ARTICLE INFO

## ABSTRACT

Personalized marketing has changed the game for companies looking to establish a closer relationship with their clients in the current digital environment. With the development of artificial intelligence (AI), businesses now possess a potent instrument to transform consumer interaction. Artificial intelligence, customized artificial intelligence, trade, sales, electronic commerce, machine learning, human, big data, and people are the most frequently occurring terms. Artificial Intelligence (AI) is transforming personalized marketing by allowing companies to analyze enormous volumes of data and provide individualized client experiences on a large scale. The many uses, advantages, difficulties, and potential consequences of artificial intelligence (AI) in personalized marketing are examined in this research. This paper will talk about. Personalized marketing and the role of artificial intelligence.

**Keywords:** Artificial Intelligence, Personalized Marketing, Electronic Commerce, Big Data, Computer, Businesses, Data Analysis, Client Support, Chatbots, Social-Media, Hyper-Personalization.

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## Introduction:

### Artificial Intelligence

Artificial Intelligence (AI) is a computer science technique that teaches machines to understand and mimic human behavior and communication. AI has produced a new intelligent computer that thinks, reacts, and works in a manner similar to that of humans based on the data that was made available. Artificial intelligence (AI) is capable of extremely complex and specialized tasks including robotics, audio and image recognition, natural language processing, problem-solving, etc. Artificial Intelligence is a grouping of many technologies that can do jobs that require human intelligence. These technologies possess human-like intelligence in their ability to learn, act, and execute when integrated into routine business activities. It saves us time and money in business transactions by simulating human intelligence in machines. [1]

If companies wish to successfully engage customers in today's marketing environment, they can no longer afford to overlook the significance of tailored tactics. Artificial intelligence (AI), which enables the tailoring of information distribution to users based on their demographics, interests, and activities, is a game-changer in this regard. India's market is diverse, expanding quickly, and experiencing a high rate of digital penetration along with shifting customer preferences. The context for investigating AI's function in tailored marketing in this setting is established by this introduction. Creating the Environment for Customized Advertising: The quick changes in India's socioeconomic and technological landscape have made customized marketing strategies increasingly crucial. The country's rich cultural heritage, expanding middle class, and rising level of digital literacy have led Indian consumers to seek more individualized experiences that meet their personal preferences and objectives. Taking this into consideration, artificial intelligence presents an unparalleled opportunity for Indian businesses to leverage data-driven insights and initiate highly targeted marketing campaigns.

The way AI is transforming marketing strategies. It signifies a profound change in the way marketers see, engage with, and target consumers. The utilisation of AI in marketing endeavours can facilitate enhanced customer interaction, more accurate ad targeting, and more efficient decision-making through the provision of data-driven insights, personalised experiences, predictive analytics, and automation. This shift indicates a shift toward more precise, effective, and personalized advertising approaches driven by AI.

Artificial intelligence (AI), which can analyze vast amounts of data, automate processes, and improve decision-making, is now an essential part of modern marketing strategies. Thanks to AI, marketers may leverage technology for data analysis, personalization, automation, and predictive analytics, thereby increasing their power. It helps improve overall marketing strategies for greater client understanding, tailored experiences, and higher engagement and conversion rates.

**Analysis of data and insights:** Large datasets are processed quickly by AI, which provides marketers with useful data on the preferences, behaviors, and trends of their target market. It helps with the analysis of consumer journeys, purchasing trends, and demographics, enabling more informed and data-driven marketing decisions.

**Personalization:** AI uses customer data to create experiences that are tailored to each individual, enabling targeted marketing. By offering offers based on user preferences, product recommendations, and personalized content, marketers may increase engagement and conversion rates. [2]

**Predictive analytics:** AI-powered predictive analytics makes predictions about future patterns and behaviors based on historical data. By utilizing these insights, marketers may more effectively allocate resources, anticipate customer needs, and optimize campaigns.

**Chatbots and customer support:** Chatbots driven by AI offer round-the-clock customer support, addressing inquiries and helping customers with their purchasing. Chatbots can understand customer inquiries and provide efficient responses thanks to natural language processing (NLP).

**Marketing Automation:** AI is used to automate a variety of marketing tasks, including email marketing, social media posting, campaign management, and more. AI frees up marketers' time to focus on strategy and creativity by handling repetitive tasks.

**From a Social Media Perspective:** AI-powered tools analyze social media conversations, sentiments, and patterns. Marketers gain valuable insights that enable them to identify opportunities for growth, enhance their social media strategies, and engage with customers in meaningful ways.

### **AI-based Personalized Marketing**

Personalized marketing, sometimes referred to as one-to-one marketing or individualized marketing, uses data to provide each customer with experiences and messages that are specifically catered to them. Personalized marketing based on AI is a tactic that leverages AI to provide each consumer with a customized experience. There are numerous ways to do it, including via email, social media, websites, and mobile devices.

Personalized marketing is to give consumers a more relevant and interesting experience, which can boost sales, raise customer happiness, and strengthen brand loyalty. Understanding customer preferences, behaviors, and interests requires gathering and analyzing vast amounts of customer data. AI systems that gather data can produce and distribute targeted advertising, product recommendations, and content via email, social media, websites, and other means.

AI-Powered Personalized Marketing To deliver individualized experiences, personalized marketing makes use of a variety of channels and mediums, including websites, mobile applications, social media platforms, email, and e-commerce platforms. In order to divide up the customer base into distinct groups and develop tailored marketing plans for each, it frequently entails gathering and evaluating consumer data, including browsing and purchase histories, demographic data, and engagement patterns. Businesses stand to benefit greatly from individualized marketing in the future as data analytics and technological breakthroughs continue to reshape the field of marketing.

Increased Customization in order to collect and analyze consumer data, businesses will have access to increasingly more advanced tools and technology, which will enable deeper insights into the preferences and actions of specific individuals. Businesses will be able to provide extremely customized experiences, offers, and recommendations based on the requirements and preferences of each individual client thanks to this.

#### **• Harnessing the Power of AI:**

Businesses may use AI to execute tailored marketing at scale with effectiveness. Massively parallel learning algorithms are capable of analyzing large volumes of client data, such as browsing patterns, past purchases, social media interactions, and demographic data. Through data processing, artificial intelligence (AI) can reveal insightful patterns and insights that assist organizations in better understanding client preferences, forecasting behavior, and audience segmentation.

#### **• Hyper-Personalization: Delivering Customized Experiences:**

Hyper-personalization made possible by AI-powered personalization elevates marketing to a new level. Businesses may use AI to provide each consumer with a highly personalized experience in real time. AI helps companies to generate distinctive and pertinent touchpoints that improve consumer engagement and

happiness, from personalized product suggestions and customized email campaigns to dynamic website content and chatbot conversations.

Cross-channel Customization Across many channels and touchpoints, personalized marketing will function flawlessly. Regardless of the channel or device, businesses can offer consistent and customized customer experiences. This includes customized social media interactions, individualized email marketing, individualized website messages, and customized in-store experiences (Gitter, 2020). Furthermore, companies will be able to design smooth, uniform, and customized experiences across a range of touchpoints thanks to the growth of omnichannel marketing. [3]

### Benefits of using AI in personalized marketing

The application of AI to personalized marketing has various advantages. Processing and analyzing large amounts of data fast and accurately is one of the main benefits. Artificial intelligence (AI) systems are able to recognize trends in customer data and forecast their needs, preferences, and behavior. This makes it possible for marketers to craft unique customer experiences for each one of their clients, including product recommendations, targeted advertisements, and tailored messaging.

The potential to automate and expand marketing initiatives is an additional advantage of utilizing AI in personalized marketing. Marketers no longer need to manually design tailored experiences for millions of clients when they utilize AI-powered technologies. In addition to improving the client experience, this can save time and resources.

Real-time optimization of campaigns is another benefit of AI for marketers. AI algorithms can instantly improve the efficacy of campaigns by assessing client data in real-time and making necessary adjustments. AI is capable of identifying issues and recommending solutions, for instance, when a campaign is not functioning up to par. [4]

### Applications of AI in Personalized Marketing

- **Customer Segmentation:** By using psychographics, demographics, and behavioral patterns to identify unique consumer segments, AI algorithms enable marketers to target particular audience segments with offers and content.
- **Predictive analytics:** By using AI to build predictive models, marketers can proactively cater to the requirements and preferences of their customers by forecasting future customer behaviors like chance of purchase or probability of turnover.
- **Dynamic Content Generation:** Based on unique user characteristics and behaviors, AI algorithms dynamically create personalized content, such as emails, advertisements, and product suggestions.

**Particularized Suggestions:** AI-powered recommendation engines examine user data to make content, service, or product recommendations that are relevant and improve the user's browsing or buying experience.

**Real-time Marketing Automation:** AI makes it easier to make decisions in real-time throughout marketing campaigns. It allows for automatic modifications to bidding, targeting, and messaging in response to shifting consumer behavior and market conditions.

### Importance of AI in Personalized Marketing

The term "personalized marketing" is a marketing approach that focuses on sending specific offers, recommendations, and communications to each individual customer based on their interests, behavior, and demographics. In order to increase customer satisfaction, engagement, and conversion rates, the strategy uses customer data to provide a personalized experience for each individual customer. Presently, as customers increasingly choose to buy from brands that provide tailored experiences, marketing personalization has become essential for organizations to make money and obtain a competitive edge in the market.

Artificial intelligence (AI) techniques like machine learning (ML), natural language processing (NLP), semantic search, neural networks, and sentiment analysis can be applied in personalized marketing to effectively create customized experiences by gaining insights into customer preferences and behavior based on large amounts of customer data, such as social media activity, browsing behavior, purchase history, and demographic data. [5]

### The Evolution of Personalized Marketing

Over time, personalized marketing has experienced substantial changes in response to changing consumer preferences and technology improvements.

To target messaging to particular audience categories, personalized marketing first depended on manual segmentation and fundamental demographic data.

But as digital technologies and data analytics proliferated, personalized marketing changed into a more data-driven strategy that made customisation and targeting more accurate.

Artificial intelligence is a major influence on personalized marketing techniques nowadays, allowing firms to develop hyper-targeted campaigns based on individual interests and habits. AI systems examine enormous

volumes of data to forecast customer behavior, allowing marketers to send the appropriate message to the appropriate person at the appropriate moment.

Through this progression, personalized marketing has moved from a one-size-fits-all strategy to one that offers customers a more relevant and customized experience.

With the use of artificial intelligence (AI), marketers can now provide offers, information, and suggestions that are specifically tailored to each individual customer.

The development of personalized marketing will probably result in ever more immersive and customized experiences for customers as technology develops. [6]

### **Review of Literature:**

Businesses constantly look for innovative methods to engage with their customers and drive growth in the digital world of today. Customizing marketing content and experiences for specific customers is known as personalized marketing, and it has become a very effective tactic. Personalizing marketing messages, offers, and experiences to individual consumers based on their own requirements, interests, habits, and demographic data is known as personalized marketing. In order to develop highly targeted and personalized marketing efforts, it entails utilizing data-driven insights and cutting-edge technologies (Ayub et al., 2023). [7]

An era of information overload has been ushered in by the digital revolution. It is getting harder for firms to distinguish out when consumers are inundated with generic marketing messages all the time (Abildtrup, 2024). Personalization has emerged as the key to establishing more meaningful connections with customers in this highly competitive market. Imagine getting a birthday discount on a product you recently examined online or on your favorite brand of shoes. These unique touches draw attention and give customers a feeling of worth. [8]

The influence of personalization on consumer engagement is emphasized in Berger's work. The study investigates the relationship between improved consumer satisfaction and enhanced brand loyalty when marketing messages are customized to individual preferences. It explores the psychological facets of customization and how it affects customer behavior. [9]

People today use artificial intelligence (AI) in some capacity on a regular basis. The user appreciates the automatic e-mail filtering option, for instance. The owner of the smartphone is likely to utilize Bixby, Cortana, or Siri to fill out a calendar. When operating the new car, a provides assistance to the driver. According to Davenport et al. (2020), artificial intelligence has the ability to automate business procedures, learn from historical data, and produce consumer and market insights through program-based algorithms. Machine learning (ML), deep learning, and natural language processing (NLP) are some of the technologies that teach machines to handle large amounts of data in order to produce market intelligence. [10]

Some variables, such as the climate, infrastructure, monuments, social or family environment, and economic aspects, among others, are what entice individuals to visit a particular region in person (Huete, 2009). Both public agencies and commercial businesses are aware of the traits that draw in outside customers. They can use this information to craft marketing campaigns that influence these consumers and encourage them to stay in that specific location by pricing services accordingly. [11]

### **Objectives:**

- Overview of personalized marketing and its importance in contemporary business environments.
- Introduction to Artificial Intelligence and its relevance to marketing.
- The role of AI in enabling personalized marketing strategies.
- To Assess the Adoption of Artificial Intelligence (AI) in Personalized Marketing.
- To Explore the Effectiveness of AI-Powered Personalization.
- To Understand Consumer Perceptions and Responses to AI-Personalized Marketing

### **Research Methodology:**

The overall design of this study was exploratory. The research paper is an effort that is based on secondary data that was gathered from credible publications, the internet, articles, textbooks, and newspapers. The study's research design is primarily descriptive in nature.

### **Result and Discussion:**

Companies are managing a fundamental shift in the way they engage with customers in the ever-changing landscape of modern business. This change depends on the mutually beneficial relationship between personalized marketing and artificial intelligence (AI). As AI technologies and marketing strategies come together, a new era of personalized, relevant, and individualised client experiences has begun.

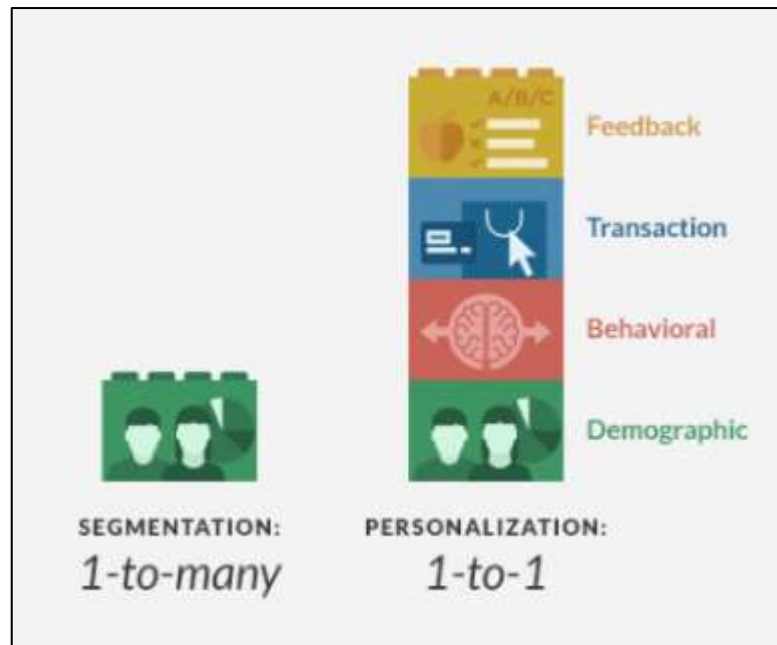
The relationship between marketers and customers is altered by the intricate developments brought about by AI's impact on personalized marketing. Artificial intelligence (AI) enhances the efficacy of marketing campaigns and builds a more meaningful and enduring customer experience in the digital age by leveraging

data, hyper-personalization, process automation, predictive analytics, and better customer engagement. The field of AI-powered personalized marketing appears to be a dynamic and constantly developing one as businesses continue to implement these innovative technologies.

### Marketing Personalization Important:

Consumers now expect businesses, particularly the ones they use most regularly, to be able to relate to them personally and understand their requirements and preferences. A company's marketing effort should include marketing personalization in addition to marketing intelligence. At every step of the way, prospects expect to receive personalized messages, offers, and recommendations.

You could be losing out on a significant amount of money if your company can't handle it. Actually, 27% of customers say they would completely quit using a brand following a non-personalized experience, and 45% of consumers say they are less inclined to make a purchase from that company. [12]



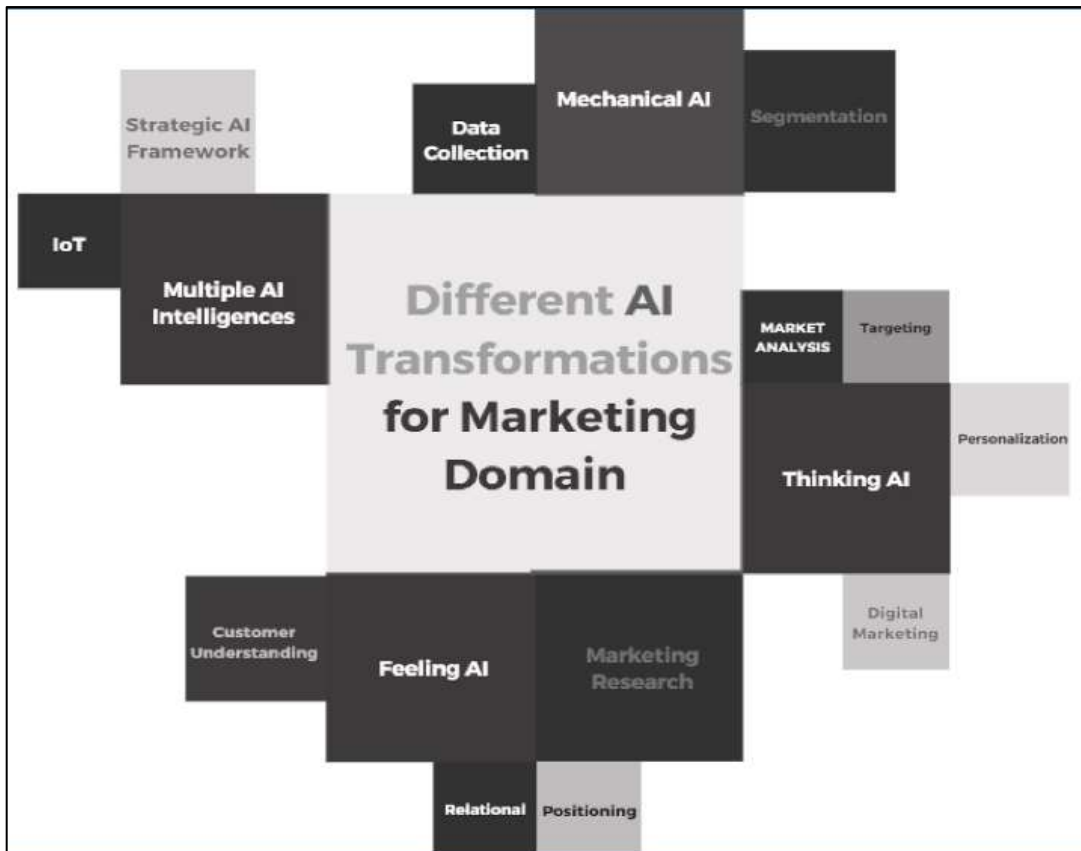
**Figure 2: Marketing Personalization Important**

You may show that you're paying attention to the needs of certain clients by using personalization. Building a connection with each client will help you grow your consumer base and foster enduring loyalty. Account-based marketing (ABM), which depends on individually targeted marketing, needs to pay particular attention to this.

### Various AI-based Transformations for Marketing Sectors

Various AI-driven changes have increased the marketing domain's effect and impressiveness. The several AI systems utilized to achieve the multiple intended purposes for addressing the marketing problems in today's competitive and sophisticated level public relations are shown in Fig. 3. Additional inputs for implementing AI to handle market-level tactics include data collecting, in-depth market analysis, digitalization through AI methods, careful consumer understanding, study and need finalization in the market domain, etc.





**Figure 3: AI transformations for marketing sectors.**

**Some Specific utilities of artificial intelligence in various marketing segments:**

Figure 4 shows the different main marketing segments of AI efforts. When it comes to marketing scenarios aimed at AI-based systems, pricing, strategy and planning, product, promotion, and place management have all been crucial. Other factors that have been identified as critical to the marketing of AI applications include scenarios, thinking models, positioning and targeting in relation to the needs of the end user and the design of the product. [13]

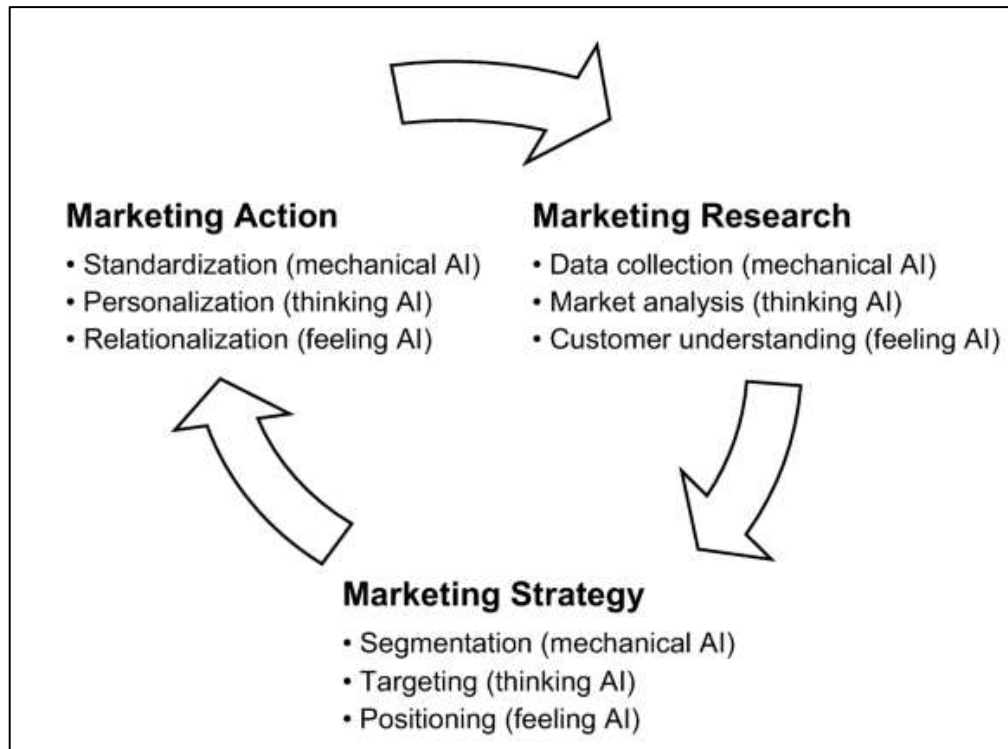


**Figure 4: Several Segments for AI applications in Marketing Domain.**

## Conceptual Foundation

### The marketing research–strategy–action cycle

The marketing research, marketing strategy, and marketing action cycle serve as the foundation for our proposed three-stage structure for strategic planning. Strategic planning is seen in our cycle as a circular process that begins with marketing research to gain an understanding of the market, the company, the competitors, and the customers. Next, strategies for segmentation, targeting, and positioning are developed, and finally, targeted marketing actions are designed to carry out the strategy. The cycle continues after marketing initiatives. Figure 5 illustrates the ongoing cycle of marketing research, strategy, and action, wherein the results of marketing actions are used to inform marketing research.



**Figure 5: AI and Strategic Marketing Decisions [14]**

### AI and Personalized Marketing Strategies

Being different from the crowd is a never-ending struggle in the world of digital marketing today. Generic messages are thrown at consumers incessantly, causing banner blindness and diminishing brand memory. Personalized marketing, on the other hand, is a ground-breaking approach made possible by artificial intelligence (AI). Brands may customize marketing messages and content to specific customer preferences, purchase histories, and online behavior by utilizing AI's analytical capabilities.

The trend towards customised marketing enables companies to establish more meaningful relationships with their target audience, leading to increased engagement, brand loyalty, and eventually, an important competitive advantage. Important information about consumer preferences can be gleaned from consumer Relationship Management (CRM) data, purchase history, demographics, and previous interactions. Insights on customer interests can be gleaned from browsing habits, content viewed, and amount of time spent on particular pages.

Likes, shares, comments, and other social media interactions on various platforms provide insight into consumer mood and brand affinity. Hidden trends and consumer segments can be found by AI systems. Consider an AI system that can recognize a subset of consumers who regularly buy running shoes and who have just downloaded a fitness app. Brands can use this information to tailor their marketing messages by providing specific discounts on running apparel or by highlighting workout advice that is pertinent to their fitness objectives.

By using demographics like age or region, traditional marketing may divide up its clientele. However, AI is able to provide considerably more sophisticated segments based on a larger variety of information, such as past purchases, internet activity, and social media activity. AI gives brands the ability to tailor marketing messaging to specific target categories. An e-commerce store, for example, can provide customers who have abandoned their shopping carts incentives to finish their purchase with targeted emails.

With the help of artificial intelligence (AI), you can generate knowledge by automating the curation of vast amounts of data, including data pertaining to marketing blends. Afterwards, AIM uses its knowledge to execute and automate marketing processes, like gathering market research. With the use of this functionality, AIM can better address the unique needs and desires of each client, enabling the realization of hitherto unattainable

features. In contrast, while traditional advertising and marketing tend to focus on the firm degree and acquisition/buy pastime most effective, AIM can drill down all the way to the individual purchaser degree throughout numerous sports (e.g., acquisition, intake, and disposal) associated with services or products. Owing to AIM's significance, it has turned out to be a crucial tool that is quickly entering the majority of agencies in order to develop, share, and use expertise. Numerous studies about AI's potential to significantly improve marketing have been released in recent years. According to a survey done with the assistance of Accenture, 86% of C-suite executives thought it was imperative to grow AI throughout their companies, and 76% said they would go out of business if they didn't apply it over the next five years. More than 1400 business-to-business (B2B) advertising executives felt that the expert services industry is the best place to use AI, according to any other survey that was published. The majority of the programs are still in the experimental stage, despite the cautious use of AIM.

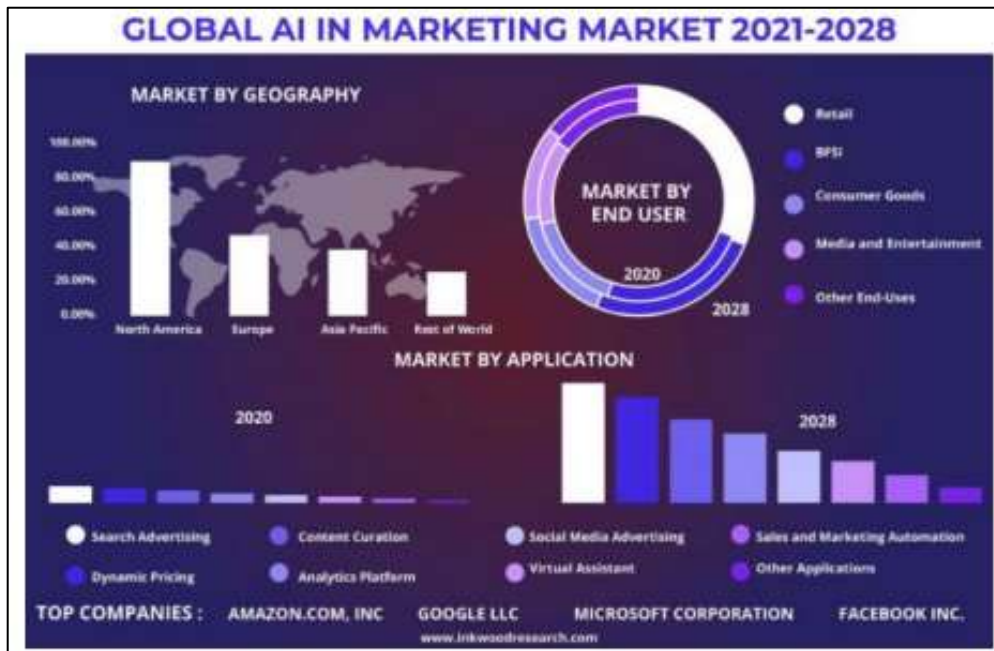


Figure 6: India Artificial Intelligence Market Size, 2023-2028 (in Million US\$)

In 2022, the artificial intelligence market in India was valued at US\$ 680.1 million. With a projected growth rate (CAGR) of 33.28% from 2023 to 2028, the IMARC Group projects that the market will reach US\$ 3,935.5 million by that time. The term artificial intelligence (AI) describes a machine's capacity to simulate mental functions. Learning, planning, identifying human-like speech, and problem-solving based on prior experiences are all aided by it. It is made up of hardware elements such as application-specific integrated circuits (ASIC), field programmable gate arrays (FPGA), graphic processing units (GPU), and central processing unit (CPU). Additionally, it has software elements that handle vast volumes of data and offer significant insights, such as machine learning (ML), natural language processing (NLP), and deep learning.

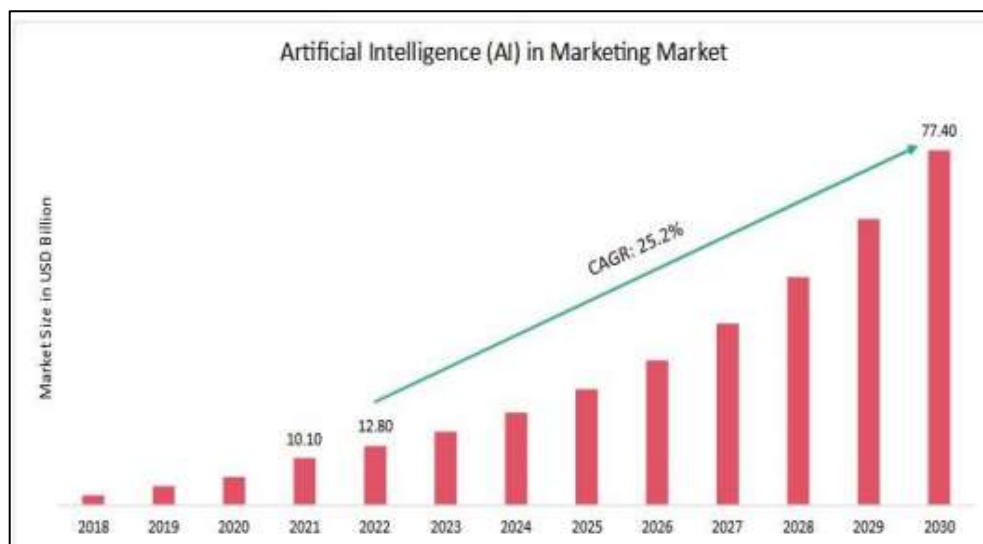


Figure 7: Artificial Intelligence Market



Customization AI enables marketers to provide clients with individualized experiences. Algorithms using artificial intelligence (AI) can produce customized product recommendations, content, and targeted ads by utilizing data about user preferences, browsing habits, and past purchases. This degree of customization raises the possibility of conversion and enhances consumer engagement. [15]

### **Examples of successful personalized marketing campaigns using AI**

Numerous effective personalized marketing initiatives have made use of AI to enhance user experiences and boost engagement. Here are few instances:

**The customized playlists on Spotify:** Spotify analyzes users' listening patterns and generates customized playlists according to their interests using AI algorithms. Due to this, Spotify has seen a notable rise in user engagement and has been able to hold onto its ranking as one of the most widely used music streaming services.

**Amazon's suggested products:** To make product recommendations that are relevant to each customer's requirements and interests, Amazon employs artificial intelligence (AI) algorithms to evaluate user activity. Amazon has become one of the biggest e-commerce platforms in the world as a result of this, which has significantly increased sales.

**Netflix offers content based on AI algorithms that examine users' watching preferences and suggest stuff that will probably be of interest to them.** As a result, there has been a notable surge in user engagement, contributing to Netflix's rise to prominence among streaming services globally.

**The virtual try-on feature at Sephora helps clients select the ideal makeup for their skin tone and type by utilizing AI-powered technology.** Customers are now much more satisfied, and Sephora's standing as a pioneer in the beauty retail industry has improved as a result. [6]

### **Conclusion:**

With technology advancing, artificial intelligence is turning becoming a vital tool for companies looking to remain competitive. It enhances client loyalty, conversion rates, and engagement. Artificial Intelligence (AI) has an innovative impact on personalized marketing, changing how companies perceive, interact with, and serve their target markets. The use of AI technologies in marketing techniques has brought in a new era where individualization, relevance, and precision are critical. Several important features of this impact are illuminated by the primary findings and insights from research conducted in this domain. Marketing professionals can now go beyond traditional demographic targeting and explore the nuances of individual tastes, habits, and real-time interactions. AI has revolutionized customization by rapidly and accurately analyzing large amounts of data. With the help of predictive analytics, organizations can now anticipate customer trends and demands, which helps them create more focused and proactive marketing campaigns. Artificial Intelligence (AI) is transforming digital marketing at a breakneck pace, providing organizations with previously unheard-of chances to provide customers with more relevant, personalized, and engaging experiences. Marketing professionals may use the array of potent tools that AI technologies are bringing to the table to improve their plans and produce more significant commercial results.

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