

Dr. B.MANJULA-RISE OF ARTIFICIAL INTELLIGENCE IN MARKETING-2022



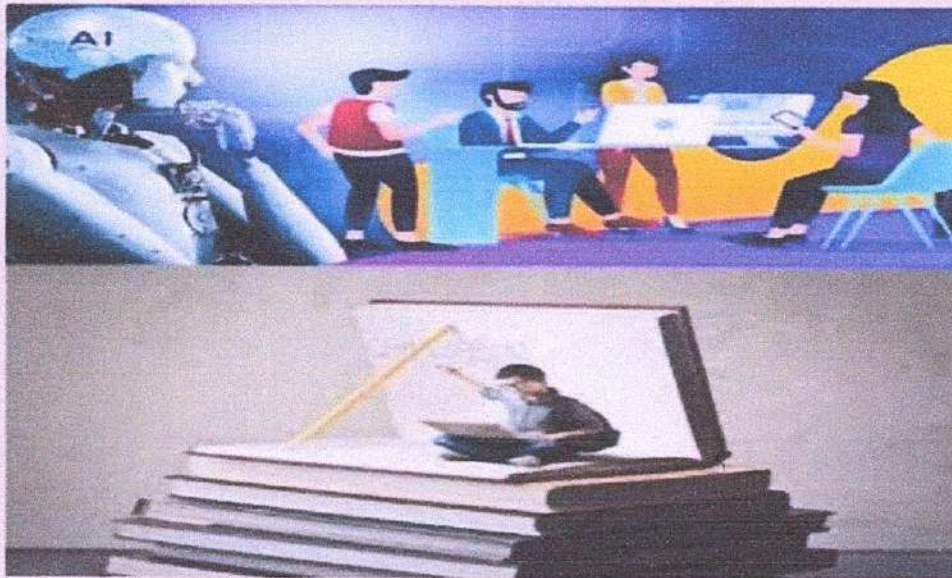
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Volume 2 / December 2022

ISBN: 978-81-952402-7-2

BOOK CHAPTER ON ARTIFICIAL INTELLIGENCE IN MANAGEMENT AND COMMERCE



Organized by
Department of Business Administration, Commerce, Commerce CA
& K.M.G. Research and Development cell
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**DEPARTMENT OF BUSINESS ADMINISTRATION,
COMMERCE, COMMERCE CA & K.M.G. RESEARCH
AND DEVELOPMENT CELL**

Volume 2

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RISE OF ARTIFICIAL INTELLIGENCE IN MARKETING

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ABSTRACT

People are consuming more digital content daily by spending more time online. The digital tools and sites they use play an ever-growing role in their lives. Smart marketing companies recognize this and adopt the concept of artificial intelligence in their marketing strategies. Artificial intelligence is revolutionizing the marketing world presently. Big data and exponential growth in computing power have opened the doors for artificial intelligence to take off. With advancements being made in machine learning, neural networks, and deep learning technology, more companies are looking into artificial intelligence to make their operations smarter and more efficient. Increasingly, the world of marketing is embracing these resources to make sense of data, learn more about customers, and streamline operations. This paper begins with an introduction to Artificial Intelligence marketing and it further explores how marketers are utilizing the power of Artificial Intelligence and discusses the necessity of using this strategy for the marketing of products and services.

Key Words–Customer Relationship Management, Artificial Intelligence, Marketing.

INTRODUCTION

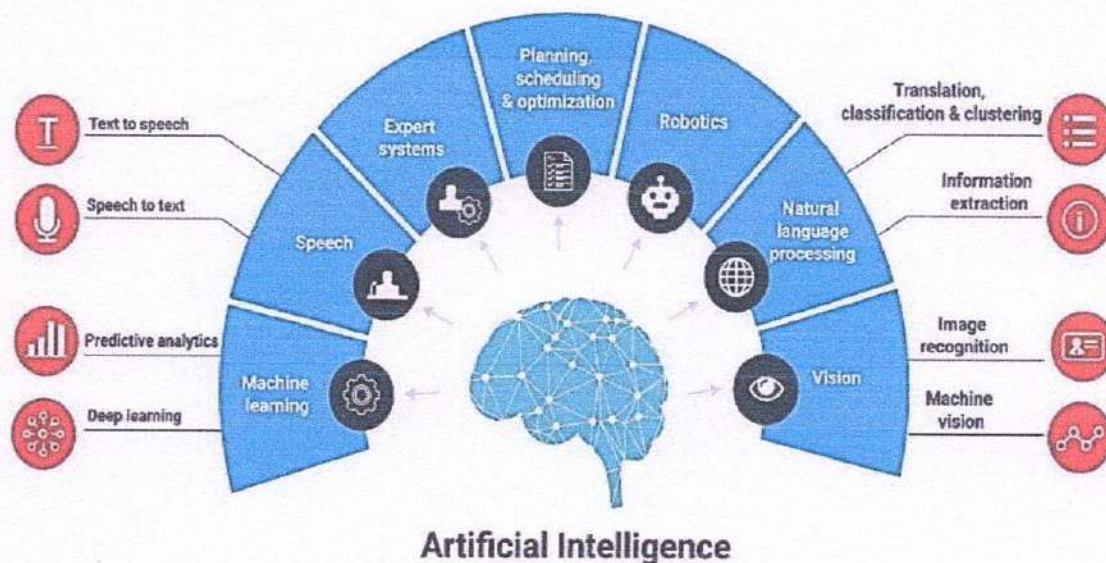
Artificial Intelligence (AI) is all around us. Perhaps, to some, it may still be a new concept, but it already has a huge impact on our everyday routines. The notion of Artificial Intelligence (AI) was first presented by renowned scholars at Dartmouth College (US) conference held in 1956. Their definition of AI is the ability of machines to understand, reason, and learn the same way as human beings do, indicating that there are possibilities that computers can be used to simulate human intelligence.

MEANING OF ARTIFICIAL INTELLIGENCE (AI)

Artificial intelligence (AI) is intelligence demonstrated by machines, as opposed to the **natural intelligence** displayed by animals and humans. AI research has been defined as the field of study of intelligent agents, which refers to any system that perceives its environment and takes actions that maximize its chance of achieving its goals.

The term "artificial intelligence" had previously been used to describe machines that mimic and display "human" cognitive skills that are associated with the human mind, such as "learning" and "problem-solving." Artificial intelligence was founded as an academic discipline in 1956.

MARKETING IN AI



Adopting modern marketing techniques is becoming essential for all businesses to remain competitive in the market. Without a deep understanding of customer preferences and their needs, marketers are not able to make the right decisions and rely on them for success. Therefore, they must be swift in acquiring the right knowledge about the customers and act upon it effectively at the same time. This is where AI comes to the forefront. AI-enabled marketing techniques help marketing stakeholders make real-time, data-driven decisions; however, it is equally important to know how to integrate AI into marketing campaigns in the best possible manner.

Importance of AI in business

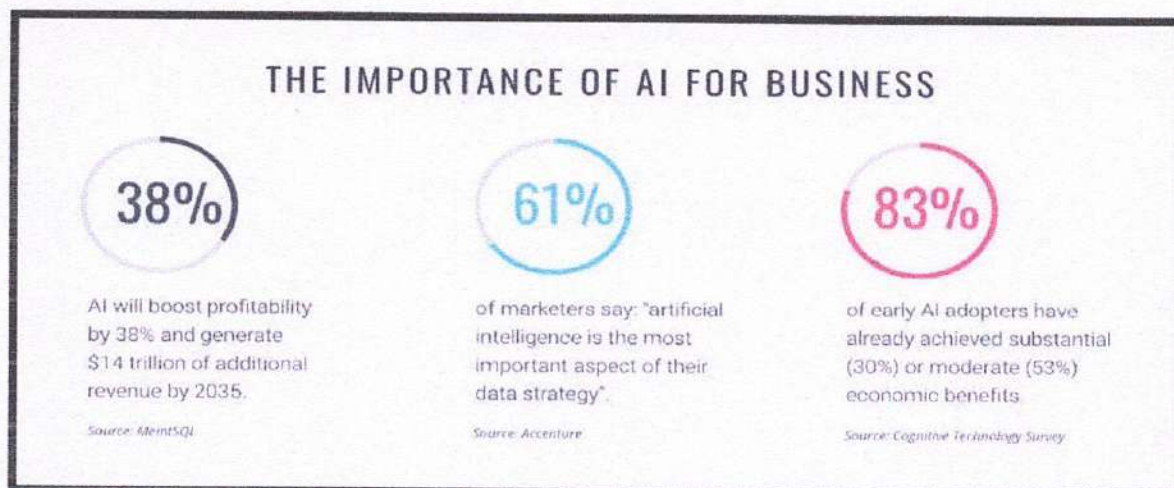
AI helps marketers better understand customers and improve customer experiences. AI-powered marketing enables marketers to create a predictive customer analysis and design customer journeys more targeted and individually tailored, which effectively increases ROI on each customer contact.

1. **Saving Time and Money** - When it comes to working, machines are more efficient than human beings. AI machines can operate 24/7 without getting bored. They also do not have to sleep, nor do they need breaks as humans do.
2. **Generate Business Insights to Make Smart Decisions** - AI machines are efficient at quick data processing to generate relevant answers to any question arising in the business. They offer accurate predictions, and customers' needs based on what they learn.
3. **Improving Customer Experience** - AI-driven chatbots allow businesses to provide customer care services 24/7. AI has enabled companies to automate communications through

emails, online chats, and even telephone calls. The good thing with AI is that it can interact with many customers simultaneously and respond to their questions effectively on websites or apps.

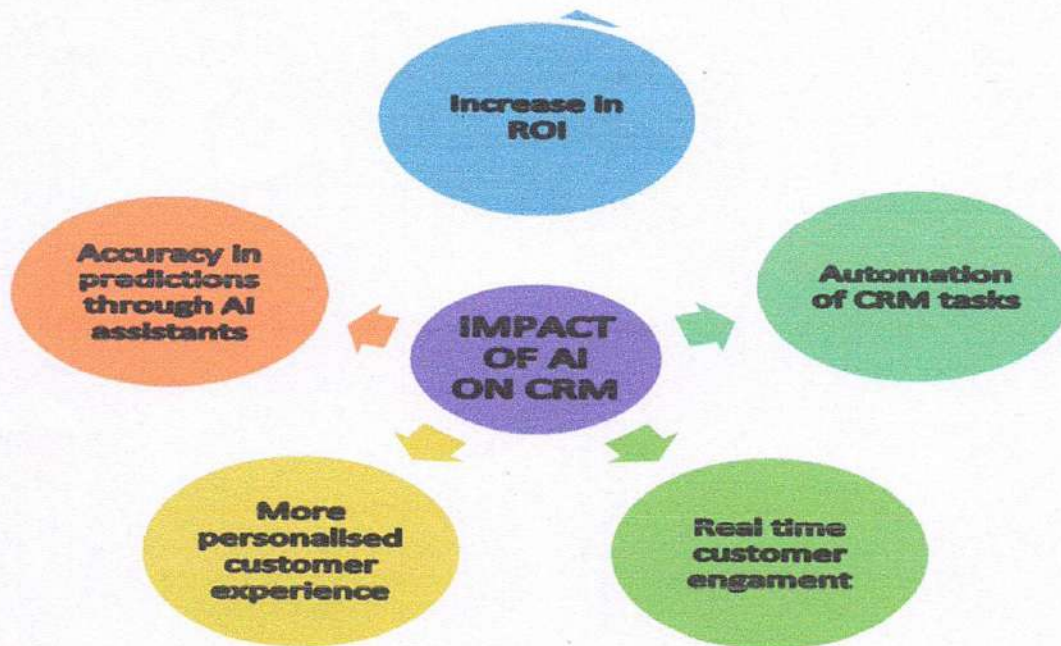
4. AI Technology Enhances Productivity - With AI technology, you will not have to pile a lot of work for your employees to handle since AI will do the most work. This allows your workforce to do what they are best at, thus boosting productivity. If your business involves constant communication with customers throughout the day, AI will offer real-time assistance. For example, in the travel industry, which has millions of thousands of passengers every day, AI can pass important travel information to passengers.

5. Reducing Errors - In any company, the most time-consuming process yet prone to human error is cash flow forecasting. AI technology can help in increasing accuracy in forecasting cash flow without manual interference. This gives the business a higher chance of achieving success.



Significance of AI in CRM

The role of marketing managers has also been affected by the intervention of information technology and AI in particular as it is now more important to understand the customers better or there is a risk of losing them to competitors who responds to their needs and wants. AI makes it convenient for business firms to understand their customers better and assess their behavior towards products and services. It also helps in making calculated decisions once you have access to all the necessary data regarding your intended customers.



Scope of AI

For corporations, it can be very useful if they fully understand what artificial intelligence is and how its implementation can be beneficial for the overall business strategy because AI is already transforming areas like finance, e-commerce, logistics, and many others. Specifically looking at the future insights of AI on CRM, it is anticipated that AI will influence marketing strategies, along with business models, customer service, sales options, and customer behaviours. According to research, AI is also considered a practical tool that has the capability of improving the efficiency and productivity of marketers through predictive analytics, automated email conversations, lead scoring, customer insights, and a personalized customer experience.

COMPONENTS OF AI IN MARKETING

There are a few main components of AI in implementing marketing. They are:

1. Machine Learning

Machine learning (ML) is one of the best-known types of artificial intelligence (AI), which enables software applications to use historical data to predict the most accurate outcome without the need to program the software to do so. Over the years, the use of machine learning in enterprises has grown tremendously, and there is almost no area of modern business that remains untouched by ML (Burns, 2020). Machine learning is specially designed to process large amounts of data quickly by exploring it for patterns and predicting future outcomes based on these patterns

2. Artificial Neural Networks

An Artificial Neural Network (ANN) is a part of a computing system that is intended to simulate the way the human brain analyzes and processes information. It is the basis of artificial intelligence and resolves problems that would otherwise be impossible or difficult by human/statistical standards. ANNs have self-learning abilities that assist them in producing better results as more data becomes available. Hence, to name, artificial neural networks are used for speech recognition, learning, and vision. Furthermore, deep learning and predictive data analytics are techniques used by artificial neural networks.

3. Deep Learning

Deep learning is a type of machine learning and artificial intelligence (AI) that imitates the way humans gain certain types of knowledge. Deep learning is an important element of data science, which includes statistics and predictive modeling. It is extremely beneficial to data scientists who are tasked with collecting, analyzing, and interpreting large amounts of data; deep learning makes this process faster and easier.

Deep learning AI can learn without human supervision, drawing from data that is both unstructured and unlabelled.

4. Predictive data analytics

By using predictive data analytics, firms can forecast the future outcomes of any activities and decisions based on historical data and AI techniques such as ML and statistical modeling (Edwards, 2019). Any organization can now predict the trends and determine reliable statistics about their decisions in upcoming days, months, or even years...

Specifically, for marketing, predictive data analytics can be very useful in boosting marketing campaigns, predicting customer behaviours, and creating personalized marketing for each segment.

MARKETING STRATEGIES IN THE DIGITAL ERA:

In this modern era, many businesses grow rapidly because of the availability of assistive technologies. The most popular use of technology in marketing is social media. Social media has been a very important asset in marketing development and is necessary for business growth. Not only because today is a digital era, but also because it is easy. With all these new technologies, there are some new marketing strategies for business people to promote their products. Some of them are discussed below.

✦ **Content Marketing** – Content marketing is now a major focus for many brands because of its important role in social media, multimedia, and mobile search. Many

companies still don't understand the importance of trends and how content marketing underlies almost all digital marketing. It is very important to create brand awareness.

✦ **Mobile Marketing** – A lot of people now use smartphones and tablets because it is easy and time productive because they can bring them everywhere and access them anytime they want. The continuous increase of Smartphone and tablet users makes the availability of marketing content for the mobile platform because of a necessity. Companies should redesign their website to make them responsive to mobile devices.

✦ **Integrated digital marketing** – Integrated marketing is important to ensure that all messaging and communications strategies used in marketing are unified across and centred on the customer. For eg: Google invented Google + for many reasons, but one of them is to be able to see and catch social signals and patterns.

✦ **Continuous Marketing** – Actively and continuously reminding the customer about the product is one of the popular marketing strategies right now. But it is also important to balance the promotion of the product in offline mode.

✦ **Personalized Marketing** – The marketing approach through traditional media such as television becomes less effective because of media saturation. Now there is a new marketing strategy called personalized marketing. Using computer software to read and craft individual messages. The computer will read customers' behaviour and provide them with relevant information.

✦ **Visual Marketing** – Instagram, Pinterest slide share and much more can be used for this strategy. It is necessary to be able to put a marketing message and signal in an object or image. This new marketing trend is used to raise the involvement of digital marketing.

Ways to pump up digital marketing efforts using AI

1. Propensity modeling and Predictive analytics to predict the behaviour of customers

Propensity models are statistical scorecards that are built to identify prospects who are more likely to respond to an offer. It correlates customer characteristics with anticipated behaviours. In this, the target audience and the campaign objectives are defined and the tool automatically recommends strategies to achieve the desired goals.

Predictive analytics allows marketers to extract information from data and uses it to predict purchase trends and user behaviour patterns. This tool analyzes large volumes of data and helps to uncover the most impactful insights. It works via the following steps:

- i. Identifying the objectives and analysing the data extracted to determine patterns or models that match our needs.

ii. Creation of models and their validation. In this step, data mining is used to refine and select a final model. The models are validated based on the set goals.

iii. Application of the model results in business decisions and constantly refining the models for better outcomes.

2. Accelerated Mobile Pages to reduce load time

Accelerated Mobile Pages is an open-source initiative that makes it easy for publishers to create mobile-friendly content once and have it load instantly everywhere. Google announced AMP web pages which are a lighter version of the traditional web pages and aim to drastically improve the performance of the mobile web, such as reducing page load time to improve the user experience.

AMP pages increase the chances of ranking in the top three search results of Google.

3. Using AI-powered chatbots to improve user experience

Most businesses are already aware of and use live chatbots or AI systems where we chat with an instant messaging format. This makes our website unique, valuable, and engaging and stands apart from others.

Privilege in adapting Artificial Intelligence systems

To customers

1. AI systems can assist customers 24x7.
2. Search sessions get easier as AI easily tracks user behaviour and predicts their future web behaviour and decisions, which would lead to better keywords and even, increases the use of semantic keywords.
3. They can retain customer data and they don't have to repeat every interaction.
4. They are friendly and always treat customers politely and with patience.
5. They can handle several customer requests simultaneously so that the waiting time is reduced to nil.

To Marketers

1. AI is the base for digital help. Armed with big data insights, digital marketers can greatly boost their campaign's performance and return on investment.
2. Minimal manual work and accounts for lesser errors.
3. It ensures the right message is being delivered to the right person at the right time, via the channel of choice.
4. It promotes the brand image of the company and builds more prospective customers which increases the sale of goods and services.
5. Personalized advertisements can be created for users to boost sales.

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