

Impact of Artificial Intelligence in Marketing

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Abstract

Artificial Intelligence (AI) has been an emerging phenomenon in a variety of fields in recent years: technology, business, medicine, automotive, and education. However, AI has made its way deeper into marketing in the last few years, helping brands develop every step of the consumer journey. In addition, instruments previously limited to companies at the enterprise level have become inexpensive and open to medium and small businesses. This study is to explore how widely AI is implemented in marketing and what consequences it has for marketing practitioners. This study concludes based on the gathered information, that AI helps in all aspects, especially in marketing the growth of the industry is found to be high compared with non-using AI industry. The study offers business implications, in particular ideas about marketing deployment of AI, developing products and ideas about how to leverage new skills into the marketing team mandated by the new technology.

Index Terms— Artificial Intelligence, AI, Marketing, Machine learning.

I. INTRODUCTION

Artificial Intelligence (AI) has proven useful in many ways, from driver less vehicles to providing responses to customer service like Chabot etc. While many businesses want to take advantage of AI to enhance marketing, they lack a mechanism for implementing a Marketing AI project. Artificial Intelligence (AI) is one of the most common buzzwords in business today but this is for a very good reason: for many marketing applications, AI has proved to be a very effective tool. AI has been around for decades, but its recent popularity stems from three major factors:

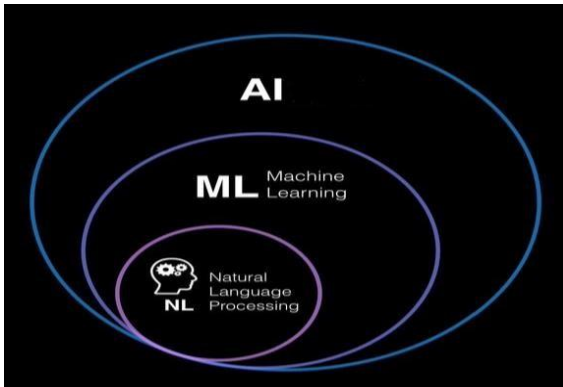
- Big Data growth
- Easy availability
- Easy intractable to customers and emergence of new AI technique

AI refers to the broad idea of computers being able to think and perform tasks like humans through the use of software and algorithms. AI automates many of the activities involved in gathering, storing, managing and retrieving information that can help in the creation and management of company offers. AI is able to train machines to recognize patterns in large amounts of data by using technologies such as deep learning, genetic algorithms and natural language processing. Popular personal-use AI tools include personal assistant

Example: Siri, Alexa, Olivia, Nest, etc.

AI has so far gained the attention of engineers, IT experts, and researchers, but is now heading beyond its typical circles of occurrence, rendering

the management and marketing sector as a strong target. The ever-increasing number of customer data available online, in big data systems or mobile devices makes AI a major marketing collaborator, since the data analysis is rooted in almost every area of its operation.



To a great extent, marketing takes advantage of data-from consumer needs research, market investigates, customer feedback, and competitive intelligence through activities in different communication or distribution channels to assess the results.

II. OBJECTIVES

1. Will AI respond to "intelligent" machines and services? Most of what can be used for commercial use?
2. Why does AI development impact all sectors and businesses across the globe? Which countries lead this AI race?
3. Was that growth affecting the cycle of traditional business? How is this impact of AI changing the business and the potential employment in key sectors?

The solutions to the above questions would help human society get equipped for the challenges ahead and recognize the rapid changes that manifest with the influx of AI in human life and market.

III. RESEARCH METHODOGY

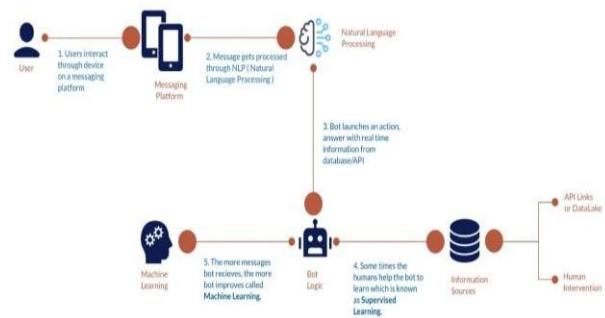
The inferences derived from the above through a **descriptive study** that provided a clearer understanding of the technologies, the actual degree of incorporation, implementation and effect of AI in enterprises.

IV. DATA COLLECTION

The data is collected through secondary data, which the overall view of the AI and its benefits are gathered from the previous data and reveals about the future growth of marketing through AI.

V. EXISTING AI MODELS MAKING SUCCESSFUL

HOW AI (i.e. Chabot) WORKS WITH HUMANS?



Nowadays users have been increased to use online purchasing or to clear any suspicions or to find a review about the product or place etc., the surfing mode helps a lot rather than approaching an individual and clearing the queries. If certain questions are unchecked and may remain to be technically apparent, the assistants are expected to fix the problems. So google launched the online assistants first to communicate with the customers to clear the queries the assistants are required to solve the issues. So the online assistants have been introduced by google first to interact with the customers to clear their needs (i.e. Chabot), which the computerized form of technology which interacts with the customer and give the feasible solution, instead of approaching the company or website to resolve. This invention makes time consumption less, easy like chatting, any queries to

be resolved. The Chatbot acts like a real human thinking and answer according to the inputs. Machine learning which helps in storing all possible of decisions to be exhibited to the customer and finally the NLP (natural language processing) helps in defining the statement as a human language at the end point.

A. The NLP Engine has two major components:

- **Intent Classifier** -It lets the algorithm understand its user's purpose to better fit the user's feedback to strength provided by the bot.
- **Entity Extractor**- trained model that extracts key information from the input query of the user.

B. Neural network input data:

- **Manual Learning** includes the list of user's commonly asked questions entered by the interaction expert manually and maps them to the chatbot's answers.
- **Automated Learning** includes sending client policy documents and all sorts of QA style documents to train the bot so that it can trustfully address all user queries.

C. Machine Learning:

- Machine learning (ML) has brought AI to a higher level, one above a set of predefined rules to obey. ML has thus altered the function of algorithms that have been used with AI since then. ML has trained computers to learn from the available data on their own by building links between individual pieces of data

VI. OTHER AI IN EXISTING MARKET

- Voice processing technologies
- Text processing technologies
- Image recognition and processing technology
- Decision-making

- Autonomous robots and vehicles

VII. DATA – FUEL FOR ARTIFICIAL INTELLIGENT

The unparalleled data volume is the power on an AI-driven platform. According to Satya Nadella, CEO of Microsoft, "Every business core currency would be the ability to turn its data into AI that drives competitive advantage." Previously, the unavailability of data hampered AI's development, but the accessibility of low-cost and low-power sensors has resulted in a large amount of data being collected in the last few years. Sensor data such as camera, global positioning system (GPS) device, safety monitoring sensor, etc., can be continuously accessed and interpreted on - the-fly or stored to obtain valuable insights through different mechanisms. Moreover, data from several sensors can be integrated using the sensor fusion technique. Other sources exist too, viz. online archives, review pages, polls, real retail sales, country census databases, manually generated / handmade data. It is feasible to process and use the raw data collected from all these sources to train an AI; the conversion from raw data to processed data is a costly and time consuming operation. There are a wide number of online data set sources, from which you we access multiple data forms.

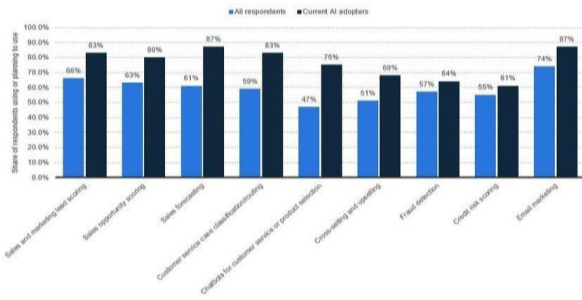
VIII. HOW ARTIFICIAL INTELLIGENT INFLUENCED IN MARKETING

A few main elements make AI marketing as effective as it is today, including big data, machine learning and the right solutions.

A. Big Data: It is a relatively simple term. It refers to the capacity of a marketer to compile and classify broad datasets with minimal manual work. Marketing teams will then use this data to

ensure that the correct message is sent to the correct person who asked about the query.

B. Machine learning: When marketers try to make sense of this massive data collection, Machine learning systems will give an easy way to feed data. They can help recognize patterns or common events and forecast common observations, responses, and reactions effectively

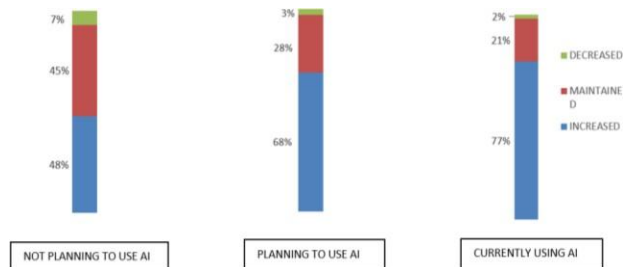


So, marketers can understand root cause and probability of repeating those responding behavior.

C. Making up right solution: Marketing strategies for artificial intelligence actually acts in the same way a person do decisions. This means that, extremely quickly, the platforms can recognize informative concepts and trends through large data sets. AI solutions also view emotion and communication as like a human being, thereby allowing such networks to understand open form content such as social media, natural language and email responses. Elimination of time-consuming and laborious routines. AI automates repetitiveness and repeatable tasks (e.g., **data collection and analysis, image search, and processing / adaptation**). Bigger value of both creative and strategic business practices. AI's reliable analyzes increase the role of innovative and strategic business practices in creating new competitive advantage. Innovations in design. AI redefine how individual consumer value is delivered and increase the difficult task of seeking new solutions through design.

Developing new Marketing Team skills. AI needs the integration of data processing expertise as well as a comprehension of the marketing team's emerging technology ability. A new platform for Marketing. AI's complexity increases the function of the companies making AI solutions. Because of the current level of AI improvement (the Artificial Narrow Intelligence level), a new model of cooperation with AI entities offering data engineering or ML techniques needs to be developed.

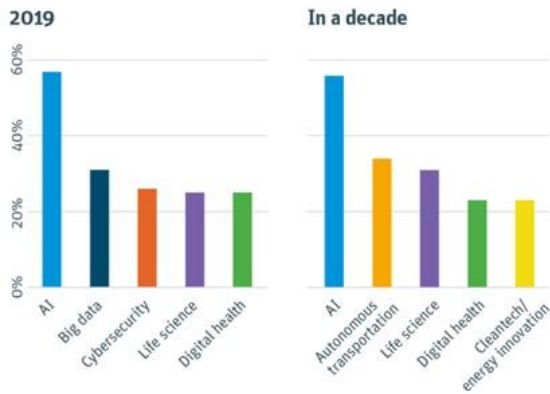
IX. ARTIFICIAL INTELLIGENT LEVEL



AI's explosive growth has elicited concerns about job security in several roles and sales are no exception. Yet today's consumers claim they want knowledgeable, trustworthy professionals based on satisfying their individual needs an innately human pursuit. The aim of AI for salespeople is not to replace them but to help them better understand the needs of their customers while alleviate the burden of manual tasks, they act as an advisor. The above data represents AI usage has be increased to 77% from 2019.

Entities believe AI and Big Data are the most exciting innovations today. Looking a decade ahead, they expect automotive transport to make a tremendous jump in growth, taking the second place after AI. From the past data we believe that AI takes the major role in bussiness part for reducing the human works and human error,

Which areas will be the most promising in the innovation economy?



reduce the time consumption and even wages to increase the work speed, innovation and growth to make the products reach the consumer and attract them.

X. ARTIFICIAL INTELLIGENCE FOR CUSTOMERS

Just like the Internet has introduced many benefits from the consumer's point of view, such as instant reviews and related product suggestions for quicker shopping time or customer service personalisation AI goes a step further and provides new opportunities in marketing practice. Analysis of the recorded examples of AI's use in marketing reveals a whole range of benefits that AI offers consumers are:

- Due to enhanced shopping (e.g. automatic billing, higher quality search engines, 24/7 customer support), more convenient and quicker shopping times.
- New customer experience by mass-scale hyper-personalization, after-sales service generating added value that goes beyond the basic product.
- A new aspect of the consumer-brand relationship generated by creating excitement and joy reduced post-purchase dissonance by digitally checking the product, removing the category learning process, and eventually taking

advantage of optimising against other consumers.

XI. CONCLUSION

The research verified the use of AI in many business sectors. In marketing sector it appears to be applied at the organizational level at present, typically as one-time programs or events. It may arise from the fact that we are dealing with the first instances of the realistic implementation of AI, and the businesses are careful to incorporate and experiment with this emerging technology.

AI in marketing appears to be applied at the organizational level at present, typically as one-time programs or events. It can be attributed to the fact that we are dealing with the first instances of the realistic implementation of AI, and businesses are careful to introduce and experiment with this new technology. Such developments have an unquestionable effect on marketing departments and organisations operations. Above all, it needs marketing departments to incorporate new roles and skills, i.e. people with the right knowledge about AI, data science and expertise in developing and implementing innovative solutions. This is also about developing a new paradigm of collaboration with the organizations providing advanced AI solutions and creating an impact of synergy with respect to AI and other functions.

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