

AI IN MARKETING-IMPROVING THE BUSINESS PROCESS: A STUDY

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Abstract:

In the early 2020, everything is available on internet. In short everything is purchase and sells through the internet. It indicates the smart business with smart consumer. AI offers reliability, cost- effectiveness, solves complicated problems, and make decisions the expert system; AI is applied nowadays in most fields whether business or engineering. Social media is maybe the largest and most dynamic kind of marketing today. AI helps marketers to analyse the brand presence and conversations around them to see customer satisfaction.

Thus the power of artificial intelligence systems in digital marketing strategies enables a marketer to market his products or services and succeed in his business operations. AI quickly becomes more sophisticated and widely adopted in marketing; the power for marketers to effectively implement and manage AI solutions will become an ever more necessary for improving the business.

Keywords: Artificial Intelligence (AI), Marketing, Satisfaction.

1. Introduction:

In the early 2020, everything is available on internet. In short everything is purchase and sells through the internet. It indicates the smart business with smart consumer. So the business should enhance its level of marketing or promotion of products or services. It will defiantly increase the business, and help to consumer to meet their requirement quickly. This paper is all about the study of the artificial intelligence in marketing, which ultimately improve the business process. Artificial intelligence (AI) marketing is a method of leveraging customer data to get ahead the customer's next move and improve the customer journey. AI offers the way to link the gap between data science and execution by sifting through and analyzing huge dumps of data which was once an insurmountable process.

There are three kinds of intelligence: one kind understands things for itself, the other appreciates what others can understand, the third understands neither for itself nor through others. The first kind is excellent, the second good and the third kind useless.

-Niccolo Machiavelli

1.1 Artificial intelligence derives from information technology. it's often used interchangeably with notions like automation or robotization. AI offers reliability, cost- effectiveness, solves complicated problems, and make decisions the expert system; AI is applied nowadays in most fields whether business or engineering. Unfortunately, AI is restricted with its capability and functionality. Although computer science made our lives much easier and saved us longer than ever, scientists are predicting that by the large dependency on AI humanity could extinct. Scientists argue that by having a AI machines, people are jobless which will conclude in losing the sense of living. Since machines are learning and doing things more efficiently and effectively in a very timely manner, this might be the explanation of our extinction.

Due to their flexible and adaptable system behavior computer science techniques can help downfall different deficiencies of today's life science.. AI is proficient by concentrate how human brain thinks, and the way people learn, choose, and work while attempting to tackle a problem, and afterward utilizing the results of this review as a premise of making intelligent software and systems. [1][2]

1.2. Marketing Strategy could be a process that may allow a corporation to concentrate its limited resources on the best opportunities to extend sales and achieve a sustainable competitive advantage. A marketing strategy should be centered on the key concept that customer satisfaction is that the main goal.

Marketing strategy could be a method of focusing an organization's energies and resources on a course of action which may cause increased sales and dominance of a targeted market niche. A marketing strategy combines development, promotion, distribution, pricing, relationship management and other elements; identifies the firm's marketing goals, and explains how they're going to be achieved, ideally within a stated timeframe. Marketing strategy determines the selection of target market segments, positioning, marketing mix, and allocation of resources. It's simplest when it's an integral component of overall firm strategy, defining how the organization will successfully engage customers, prospects, and competitors within the market arena.

1.3. Process for tagging customers

The basic approach to tagging customers is to utilize historical retention information to create predictions regarding active customers regarding:

- Whether they're at high risk of cancelling their service
- Whether they're profitable to retain
- What retention ways square measure seemingly to be simplest

The idea is to match up active customers with customers from historic retention information who share similar attributes. Victimization the idea that “birds of a feather flock together”, the approach relies on the belief that active customers can have similar retention outcomes as those of their comparable forerunner.

The most fashionable use of technology in selling is social media. Social media has been a awfully vital quality in selling development and is critical in business growth. Not solely as a result of nowadays is digital era, however additionally as a result of it's straightforward. With of these new technologies, there square measure some new selling methods for business individuals to push their product. Some of them are discusses below.

Content Marketing – Content marketing is now a significant focus for several brands thanks to its important role in social media, multimedia, and mobile search. Many companies still don't understand the importance of trend and the way content marketing underlies most digital marketing. It's actually important to form brand awareness.

Mobile Marketing – plenty of individuals now use smart phones and tablets because it's easy and time productive because they will bring it everywhere and access it anytime they need. The continuously increase of smart phones and tablet users make the provision of selling content for mobile platform because a necessity. Companies should redesign their website to create it alert to mobile devices.

Integrated digital marketing – Integrated marketing is very important to confirm that everyone messaging and communications strategies that utilized in marketing are unified across and centered around customer. For eg: Google has invented Google + with many reasons, but one in every of them is to ready to see and catch social signal and pattern.

Continuous Marketing – Actively and continuously reminding the customer about the merchandise is one in every of the favored marketing strategies immediately. But it's also important to balance the promotion of the merchandise in offline mode.

Personalized Marketing – The marketing approach through traditional media like television becomes less effective thanks to media saturation. Now there's a brand new marketing strategy called personalized marketing. Using computer software to read and craft individual messages. Computer will read customer's behavior and supply them with relevant information.

Visual Marketing – Instagram, Pintrest, slideshare and far more will be used for this strategy. It's necessary to be ready to put marketing message and signal in an object or image. This new marketing trend is employed to lift the involvement of digital marketing. [4]

2. Literature Study:

Alina Isabel Ritter, Artificial Intelligence as Enabler in the Marketing Process: A Research Agenda. The paper supports to Artificial intelligence tools are important to make sure that a company stays competitive and efficient in today's dynamic environment. Deep learning and labeling tools enable more detailed profiling of customers and the environment. Final statement is currently artificial intelligence is to gather information about customers and use it to interact with them on a more targeted and personalized level. [5]

Neha Soni, Enakshi Khular Sharma, Narotam Singh, Amita Kapoor, Impact of Artificial Intelligence on Businesses: from Research, Innovation, Market Deployment to Future Shifts in Business Models. This article is all about the progressive growth of automation and AI in the last decade is attributed to two major factors: the increasing availability of big data and hardware accelerators (GPUs and TPUs). It has also provided a better understanding of how AI can reshape the markets, transform the innovation processes, the organization of research & development, business processes and the global economy.[6]

Muhammad Zafeer Shahid & Gang Li, Impact of Artificial Intelligence in Marketing: A Perspective of Marketing Professionals of Pakistan. Paper conclusion is the major influencing factors in integrating AI in marketing area competitive pressure, media attention, digital maturity, and customers. The major benefits according to the marketing professionals are increasing efficiency, time-saving in the marketing functions, improving conversion rates, a better understanding of customer information, making marketing decision more feasible, increasing the ROI, insights, enhanced service and customer satisfaction.[7]

T.Thiraviyam, ARTIFICIAL INTELLIGENCE MARKETING. Paper presents that Marketing as its core is about the mind and heart. It is about intelligence and emotion. Though we have to provide the functional benefits, we also have to occupy the emotional space in the minds of the consumers. Thus marketers must adapt artificial intelligence systems in their marketing strategies to succeed in the present era of digital marketing. It saves both time and money for the marketers, customers, prospects; and occupies the minds of customers without human intervention. [4]

Jarek, K., Mazurek, G., MARKETING AND ARTIFICIAL INTELLIGENCE. This paper concludes that, AI changes have an unquestionable impact on the functioning of marketing departments and organisations.[2]

3. Research Study:

3.1. Methodology

The paper searches the assorted dimensions attached to the concept of computer science in marketing. This paper could be a descriptive study, where examples are cited supported the references from some secondary material available and a few from the non-public experiences of the authors.

3.2. Objective

1. To understand the working of AI in marketing
2. To study the improvement after implementing the AI in business
3. To study the satisfaction of company and consumer

3.3. Limitation

This is just a study base research paper, hence doing on the basis of available literatures, online contents and personal understanding.

3.4. Hypothesis

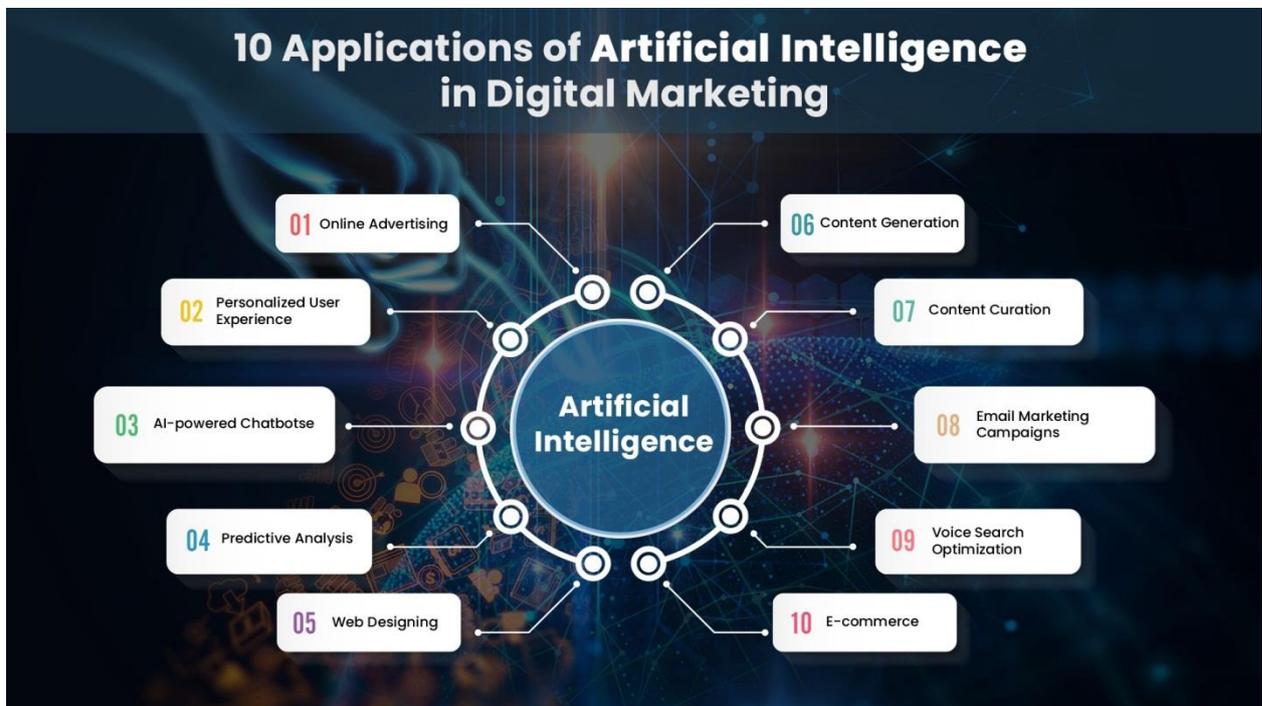
H1: AI improve the marketing performance of any company

H2: AI directly helps to the consumer in marketing

4. Current Application of AI in Marketing

The major 10 application of AI in marketing, which I observe are

- ✓ Online Advertisement: AI produces the online dynamic advertisement according to the users or customers need. By predicting the next pattern of customers, it will shows the advertisement which helps to customers.
- ✓ Personalize user experience: It always ready to personalize the user experience of the customers. It will makes the customers relax and reliable.
- ✓ AI powered CatBots: AI creates the chatbots which assist the consumer for primary queries. It also direct for the meets of consumer.
- ✓ Predictive Analysis: AI does the analysis of the existing data. The data may for single customer. On the basis of analysis of this data, AI takes the decision and performs the task.
- ✓ Web Design: for the business marketing, the company develop digital tool i.e. website. This website shows the advertisement or promotion of the product or services. AI creates such websites more conceptual, which predict the need and develop it accordingly for several products.
- ✓ Content Generator: AI produces the unique content generator for the marketing, which helps to promote the business.
- ✓ Content Curation: AI not only generates the content but also it curates the some information from that. AI discovering, gathering, and presenting digital content that surrounds specific subject matter for marketing
- ✓ Email Marketing Campaigns: AI creates email campaigns; it collects the emails and send the marketing tools to the target.
- ✓ Voice Search Optimization: AI helps the customers to search there requirement on the voice.
- ✓ E-Commerce: AI is offering smart business solutions to small and large enterprises. The AI is also benefiting the eCommerce in a large way.



Apart from this there are some special application of AI in marketing with the example are as follows

Voice processing technologies

Voice purchase requests made through a tool or the Amazon Alexa app. Virtual assistants are supporting task execution (Siri, Google Home, Cortana).

Text processing technologies

Use of a virtual assistant as a guide to steer you thru a store (Alpine.AI). A GPS navigation system that except showing the route to the selected destination suggests attractions found nearby or on the thanks to the destination, and shows similar objects to those associated with the set destination (Naver). Development and launch of recent beer recipes, and modification of the present products because of information gathered by a chatbot (Intelligentx Brew).

Development of a marketing campaign to launch a replacement car model - the Toyota Mirai. Using data provided by a specific target group, computers performed an analysis of texts and videos on YouTube so as to show the machines the well-liked kind of the said target group. Next, through multiple iterations, they developed the primary creative crusade, and also the final texts for the adverts were approved by the supervising team.

Image recognition and processing technology

Recognizing the condition of face skin, followed by a private selection of the kind of cream supported an analysis of one's photo and data, including information about the present weather (Shiseido). a photograph as a medium to look for items online. except search ends up in the shape of identical items, the computer program offers similar or complementary items (eBay). Using the client's face image to pick colour cosmetics individually during online shopping (Estée Lauder). Service-free bricks and mortar shop where video cameras analyse the chosen products and payments are made automatically (Amazon). Electronic mirrors in clothing shop that match the gathering to the client's appearance, style, and taste (FashionAI). Selection of the most effective Christmas present by surfing twelve best suggestions. supported the popularity of the buyer's face and emotion analysis, the programme suggested the most effective choice to select (eBay). Identification of clients before the beginning of a video consultation by comparing the video image with a photograph provided earlier by the client (BBVA). Embedded ML mechanisms make it possible to automatically frame images in line with the wants of the brand and communication channels (Adobe Sensei). a picture finder that produces it possible to pick the most effective photos and reject the less appealing ones (Everypixel).

Decision-making

Development of individual savings plan because of an analysis of the funds available on one's account, receipts, amount of expenses and also the way one spends their money. By comparing the financial behaviour of a user and a given community, the appliance develops a tailor-made savings conceive to match the financial capabilities of a given person (Plum). Travel destinations matched individually supported the traveller's musical preferences. except town, the app chooses specific districts and attractions to match the user's profile (Spotify, Emirates). A chatbot is preparing a cocktail recipe using the ingredients the patron has reception and supported the consumer's preferences. The chatbot analyses 300 recipes and offers the best-matched solution

(Diageo Simi Bartender). supported the user's portable data (location, sun exposure time), the app indicates the proper level of UV protection filter (Monteloeder). Dynamic matching of costs to the user supported their shopping record visited websites, or the owned portable (iperfummy.pl, kontigo.pl). Matching adverts to user characteristics supported one's online history (ING Bank Śląski). New product recommendations (Amazon, Netflix).

Synchronisation of customer data from all possible points of contact with the brand (social media, website, e-mail, phone conversation). All interactions are aggregated and presented in one place so as to supply improved customer service (Salesforce, Adidas).

Autonomous robots and vehicles

Service-free shops (Ford & Alibaba, Amazon Go, Zaitt Brasil). A robot went to check the stock on shop shelves and also the arrangement of the products displayed. Information of shortages or incorrect arrangement is shipped to the maintenance staff, who take their time to appear into the reported issues (Schnuck). An autonomous shop is offering basic and fresh products and magazines, able to travel independently to the warehouse so as to replenish the stock. The shop was tested in Shanghai (Moby Mart). [2][8]

5. AI Improving Advertisement / Promotion

Before we are visiting understand that, how the AI improve the marketing, first attempt to understand the Difference between digital marketing and AI marketing.

Digital marketing contains all marketing efforts that use an device or the web. Businesses leverage digital channels like search engines, social media, email, and other websites to attach with current and prospective customers. other than these, there's a good scope of digital marketing as promoting and branding business through digital media is that the fastest and safe mode of promoting to focus on mass audiences. Digital marketing is that the key to carry an in-demand profession.

Artificial Intelligence (AI) is that the branch of computer sciences that emphasizes the expansion of intelligent machines, thinking and dealing like humans. for instance, speech recognition, problem-solving, learning and planning. AI is gaining popularity at a faster movement; influencing the way we live, interact and improve customer experience. There are more to return within the coming years with more improvements, expansion, and governance.

The main differences between digital marketing and computer science are, in digital marketing, it's a marketing of products or services using digital channels. computer science (AI) may be a science that deals with building intelligent machines that may think and responds sort of a human. [9]

AI uses the following methods or steps to aid the marketing for consumer as well as stakeholder.

Filtering of information

Marketing is now a longtime data-driven discipline. With the effective use of information, companies are improving customer experience and reaching bent on them in a very better manner. With all the info available, analysing it becomes a Herculean task for humans. this can be where the strength of AI comes into play where complex tasks and analysis are allotted by AI leaving crucial tasks for humans to pursue.

Improving Search Experience

AI has had a profound impact on the way we search and therefore the quality of the search experience. As mentioned earlier, Google in 2015 had spearheaded the utilization of AI in its search with the introduction of RankBrain. Companies like Amazon have followed within the footsteps of Google to create searches smarter. AI has helped in innovating and enriching search results with the introduction of linguistic communication processing (NLP) and semantic search that have included smart options like autocorrect, assisting the users to find products they can't place and also provide the link between products and similar items for a large array.

Enhancing Visual Search:

Image recognition technology of AI has made it possible to try to to the impossible. The visual search technology continues to be at its nascent stage, but gradually image-based searches are replacing text-based search. it's been popularised by the likes of Pinterest and Google lens technology. The user shopping experience can improve manifold because it'll personalise their shopping experience.

Providing Product Recommendations

The collaborative filtering employed by Amazon has come an extended way in enabling product recommendations for the corporate. Today, most of the businesses are successful because they need provided personalised products to the customer supported content recommendation. With the assistance of AI-based clustering system, many companies like Amazon.

Providing Dynamic Pricing

AI uses dynamic pricing, which is employed as a results of the observance of information supported customer behaviour. Indian Railways have switched to dynamic pricing supported demand and season for all its superfast trains. Since the implementation, there was a 20 per cent increase in revenue.

Predicting Patterns

The practise of extracting data from previous records and predicting the present pattern may be a special skill set of AI. It may be utilized in analysing consumer behaviour and helps determine if the buyer would select repeat purchase or not. it'll be easier for companies to use the info to plan their future.

Consumer Segmentation

AI helps in personalising offerings for the audience by sorting through the acquired data sets and looking out for behaviours and buying patterns. The acquired data has got to be further granulated with the assistance of AI which helps within the personalisation of the buyer product. Dynamic segmentation with the assistance of AI allows an organisation to analyse behaviour supported changing preferences of consumers.

Social Media Data

Social media is maybe the largest and most dynamic kind of marketing today. AI helps marketers to analyse the brand presence and conversations around them to see customer satisfaction. AI may also spot potential business strategy or problems related to the merchandise. It helps companies to rethink and represent the products accordingly to the audience. [10]

Satisfaction

a. Company

AI features a significant impact on contemporary practices, and can surely require a brand new approach to tasks fulfilled in marketing teams:

- Elimination of laborious and time-consuming activities. AI automates routine and repeatable tasks (e.g. data collection and analysis, image search and adaptation/processing).
- Bigger significance of creative and strategic activities. Precise analyses performed by AI increases the role of creative and strategic activities to create competitive advantage.
- Design innovations. AI redefine the way the worth is delivered to the customer and increase the role of finding new solutions through design.
- Developing new competences within the marketing team. AI requires incorporating data scientist skills furthermore as an understanding of the new technology possibilities within the marketing team.
- a brand new marketing ecosystem. The complexity of AI increases the role of companies producing AI solutions. thanks to this level of AI advancement (the level of Artificial Narrow Intelligence), there's a necessity to develop a brand new model of cooperation with AI entities offering data engineering or ML tools. [2]

b. Consumer

AI goes one step further and offers new opportunities in marketing activity. Advantages that AI offers to consumers:

- More convenient and quicker shopping time because of improved processes (e.g. automatic payments, the higher quality of search engines, 24/7 customer service).
- New consumer experience via mass-scale hyper-personalisation, after-sales service that makes additional value going beyond the essential product.

• a brand new dimension of the consumer-brand relationship delivered by building surprise and delight minimised post-purchase dissonance because of the likelihood to check the considered product virtually, elimination of the method of category learning, and eventually taking advantage of benchmarking against other users. [2]

6. Finding

At the time of this paper writing started, I set some objectives and hypothesis, which is now examine on the basis of the finding from the referred literatures. Effective marketing strategy will take the right decisions to make a company successful online. To achieve a successful marketing strategy, it is necessary to follow up on new social trends and to keep interacting with the customer. Thus the power of artificial intelligence systems in digital marketing strategies enables a marketer to market his products or services and succeed in his business operations.

It is understand, how the AI work for the digital marketing. It has the long process to upgrade the business. Hence the results after implementing the AI in business, especially for marketing it really change the output. AI not only meets the goal of stakeholder but also works for the customer, and the satisfied customer do the market from same website or organisation. Ultimately it satisfies to the company.

H1: AI improve the marketing performance of any company

From the above study, it is simple to understand that the AI improve the marketing performances of any company, which having the digital market. Hence H1 is likely to be accepted.

H2: AI directly helps to the consumer in marketing

It is observe and studied that, the performance of AI is depends upon the raw data. Maximum the data, best performance by the AI. It simply means, if the customer visit the site for market by first time or second time. AI cannot support to the customer, except social media data. Hence the H2 is not accepted.

7. Conclusion

The findings it's confirmed that AI is applied in many areas of selling. Marketing as its core is about the mind and heart. It's about intelligence and emotion. Though we've got to supply the functional benefits, we even have to occupy the emotional space within the minds of the consumers. To look at the complete scope of the impact of AI the stakeholders should change their marketing strategies and take a look at to be told, how customers' behaviors will change towards the products. AI quickly becomes more sophisticated and widely adopted in marketing; the power for marketers to effectively implement and manage AI solutions will become an ever more necessary for improving the business.

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