

Comparative Analysis Between the Usage of Artificial Intelligence and Robotics in Marketing

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Abstract

AI Marketing, also known as Artificial Intelligence Marketing, harnesses the power of artificial intelligence to automate decision-making processes in marketing. It involves utilizing AI technologies to collect and analyses data, as well as observe audience behavior and economic trends that impact marketing initiatives. Particularly in digital marketing, where speed is crucial, AI is employed to streamline efforts. AI marketing tools leverage data and customer profiles to understand the most effective ways to engage with customers. These tools autonomously deliver customized messages to individuals at the opportune moment, without requiring intervention from marketing team members. This ensures optimal efficiency in marketing campaigns. AI is commonly employed by digital marketers to enhance their teams or handle tasks that demand less human involvement. The way in which we use data to make important marketing decisions and improve customer experience has been revolutionized by AI. The objective of this study was to determine the future of artificial intelligence in marketing, and to compare artificial intelligence marketing and traditional marketing. This research focused on the comparative study of AI with traditional marketing, its risks, benefits, and its impact on digital marketing and its future. A qualitative research methodology was utilized to address these topics. The theoretical framework discusses the topic of artificial intelligence in marketing, comparing it with traditional marketing.

Keywords: Artificial Intelligence, Marketing, Traditional , Marketing, Machine Learning

I Introduction

In the future, artificial intelligence (AI) appears likely to influence marketing strategies, including business models, sales processes, and customer service options, as well as customer behaviors. First, in the transportation industry, driverless, AI-enabled cars may be just around the corner, promising to alter both business models and customer behavior. Taxi and ride-sharing

businesses must evolve to avoid being marginalized by AI-enabled transportation models; demand for automobile insurance (from individual customers) and breathalyzers (fewer people will drive, especially after drinking) will likely diminish, whereas demand for security systems that protect cars from being hacked will increase. Driverless vehicles could also impact the attractiveness of real estate, because (1) driverless cars can move at faster speeds, and so commute times will reduce, and (2) commute times will be more productive for passengers, who can safely work while being driven to their destination. As such, far flung suburbs may become more attractive, vis-à-vis the case today.

Second, AI will affect sales processes in various industries. Most salespeople still rely on a telephone call (or equivalent) as a critical part of the sales process. In the future, salespeople will be assisted by an AI agent that monitors tele-conversations in real time. For example, using advanced voice analysis capabilities, an AI agent might be able to infer from a customer's tone that an unmentioned issue remains a problem and provide real-time feedback to guide the (human) salesperson's next approach. In this sense, AI could augment salespersons' capabilities, but it also might trigger unintended negative consequences, especially if customers feel uncomfortable about AI monitoring conversations. Also, in the future, firms may primarily use AI bots, Footnote which in some cases function as well as human salespeople, to make initial contact with sales prospects. But the danger remains that if customers discover that they are interacting with a bot, they may become uncomfortable, triggering negative consequences.

Third, the business model currently used by online retailers generally requires customers to place orders, after which the online retailer ships the products. With AI, online retailers may be able to predict what customers will want; assuming that these predictions achieve high accuracy, retailers might transition to a shipping-then-shopping business model. That is, retailers will use AI to identify customers' preferences and ship items to customers without a formal order, with customers having the option to return what they do not need. This shift would transform retailers' marketing strategies, business models, and customer behaviors (e.g., information search). Businesses like Birchbox, Stitch Fix and Trendy Butler already use AI to try to predict what their customers want, with varying levels of success.

The three use cases (above) illustrate why so many academics and practitioners anticipate that AI will change the face of marketing strategies and customers' behaviors. In fact, a survey by Salesforce shows that AI will be the technology most adopted by marketers in the coming years. The necessary factors to allow AI to deliver on its promises may be in place already; it has been stated that "this very moment is the great inflection point of history". Yet this argument can be challenged. First, the technological capability required to execute the preceding examples remains inadequate.

Second, the preceding examples highlight mostly positive consequences of AI, without detailing the widespread, justifiable concerns associated with their use. Technologists such as Elon Musk believe that AI is "dangerous". AI might not deliver on all its promises, due to the challenges it introduces related to data privacy, algorithmic biases, and ethics.

II The Impacts of Robotics, Artificial Intelligence On Business and Economics

The evolution of new technologies, mobile and internet, while on the other hand financial crises and economic developments, supported with the changing needs and behaviors of customers are still putting a heavy pressure on the world economics, on countries and its budget deficits, on financial services and on business especially on the profitability and revenues sides of the financial tables. The last global financial turmoil accelerated the entrance of the humanity to a new age by having strong impacts and results on the global economy. The monetary base and the issuance of the money all across the developed and G-20 countries were / are exponentially growing and capital movements and cash flows especially to emerging countries via risk capital funds, business angels, non-bank financial institutions e.g. microfinance, mobile operators boosted new entrepreneurships, SMEs and most of all innovation and more researches in companies and industries.

The "Digital Age" that began with internet and mobile technologies, plunges corporations into opening their stores in cloud and web, to mobilize together with its customer base, drag governments into launching their e-government initiatives, financial institutions into presenting themselves in tablets, mobile phones and social media. Huge transformation in doing a new type of business which is called e-business containing e-signature, e-invoice, e-commerce, internet, mobile banking and e-payments, creates efficiency in corporate and individual life. Minimizing or optimizing the work processes, business processes reengineering shifted industrial age

towards the digital age by the help of e-business environments. On the other hand, the amount of the information getting bigger and bigger every single day led business environment to analyze big data and to react simultaneously with CRM systems. Although, digital age together with other sciences like mechatronics, Nano technology, genetic and so on is a step for “Space Economics”, some other progresses are going to change business and economics directly or indirectly more than other developments. These progresses are named Robotics and Artificial Intelligence.

The “Industrial Age” has been started by the industrial revolution and mechanization primarily in UK and by car makers. Production and deriving from that the supply side of the economics have made huge impacts on business and economics at the beginning of the 20th. The Production Factors, i.e. capital, entrepreneurship, work force, land was affected by the industrial age developments and mechanization and life style, education, finance, management have been all changed due to these effects. In order to solve new issues and problems, white collars and management have come to the agenda which created higher education needs due to the level of information, decisions and quality of the work force needed. Workers in order to be at the same working time at factories or production lines have begun to live in housing estates, large buildings or complex which directed life style to live in cities rather than villages.

III An analysis to understand the role of machine learning, robotics and artificial intelligence in digital marketing

Artificial intelligence is a buzzword that needs a strong, strict meaning. It is the process of creating machines intelligent, and intelligence is the property that allows an object to perform correctly and predictably in its surroundings. Literally, artificial intelligence is a process that integrates cloud technology, network equipment, robotics, computer and digital media generation, as well as different business procedures, technologies, and day-to-day operations. Artificial intelligence computers have existed in the past, is currently in use, and will be in the future. Accepting and developing Ai Technology is critical for future marketing initiatives. Businesses use artificial intelligence software every day to optimize their own operations, minimize expenditure, reduce delivery time, and enhance production. Technology is changing at an incredible rate, and organizations who have already made the transition to marketing AI

software have a unique edge in terms of being able to capitalize on the next breakthrough. The tremendous advancements in data and communications technology in the public and private industries in recent years has triggered the creation of a new digital marketing ecosystem.

A large amount of information is presently being created as a result of the expansion of information technologies. Each day, 2.5 Quintilian bytes of data are produced, and this amount is expected to rise with the advent of the Internet of Things (IoT). It is also predicted that 90 percent of the world information has been created in the last two years. Reliable data must be generated, accessed, and used in order to make quick and accurate business choices. As a result of rapid technology advancement and its barrier-free worldwide distribution, chances for gaining a competitive edge by using new data-driven methods to marketing management have arisen.

Digital marketing evolved as a logical reaction by businesses to capitalize on and profit from the increasing customer focus on the Internet. Businesses, hospitals, colleges, professional groups, councils, and non-governmental organizations (NGOs) all employ digital marketing as part of its marketing strategy and roll out plans. A few of these businesses may have their own e-commerce platforms, although the Internet is mostly used as a channel/medium in their communications plan. These organizations generally serve as clients or marketers, which are also referred to as trademarks. Several types of businesses participate in the digital marketing area as well. The Online world enables businesses to discover more about their customers with a few clicks of the mouse in the proper assessment technique. The most significant advantages of digital marketing over traditional marketing tools and platforms are its capability to be measured. Every Internet user's digital footprint includes a large quantity of information that may be used as input for marketing research. Such advanced analytical tools utilize machine learning (ML) to understand from historic information and aid in the planning of future operations

IV AI Marketing Technology

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trends that impact marketing initiatives. Particularly in digital marketing, where speed is crucial, AI is employed to streamline efforts.

AI marketing tools leverage data and customer profiles to understand the most effective ways to engage with customers. These tools autonomously deliver customized messages to individuals at the opportune moment, without requiring intervention from marketing team members. This ensures optimal efficiency in marketing campaigns. AI is commonly employed by digital marketers to enhance their teams or handle tasks that demand less human involvement.

AI Marketing encompasses various use cases, including:

1. **Data Analysis:** Automating the collection and analysis of large volumes of marketing data from different campaigns and programs, eliminating the need for manual sorting.
2. **Content Generation:** AI generates both short and long-form content for marketing purposes, including video captions, email subject lines, web copy, blogs, and more'. **Natural Language Processing (NLP):** Utilizing AI to generate human-like language for content creation, customer service bots, personalized experiences, and more.
3. **Media Buying:** Predicting the most effective advertisement and media placements for a business, maximizing the return on investment (ROI) of marketing strategies while reaching the target audience.
4. **Real-time Personalization:** Modifying a customer's experience with marketing assets, such as web pages, social media posts, or emails, to align with their past preferences and encourage specific actions, such as clicking a link, signing up, or making a purchase.
5. **Natural Language Processing (NLP):** Utilizing AI to generate human-like language for content creation, customer service bots, personalized experiences, and more.
6. **Automated Decision-Making:** Assisting businesses in deciding which marketing or business growth strategies to employ based on historical data or external data inputs.

How does AI marketing work?

AI Marketing works by empowering modern marketers to gain a comprehensive and insightful understanding of their audience. With the advent of AI platforms, marketers and organizations can extract valuable customer insights from a diverse range of data sources. These insights serve to deepen customer connections, foster genuine engagement, and drive higher conversion rates.

AI plays a vital role in various aspects of marketing, including:

1. **Marketing Automation:** AI is utilized to automate tasks such as lead generation, lead scoring, and customer retention. By leveraging AI, marketers can identify potential customers and engage with them at the optimal time when they are most likely to respond positively to marketing messages.
2. **Personalization:** AI technologies create customer profiles based on data gathered from their purchase history and interactions. Marketers can then deliver targeted advertisements, offers, and new products that align with customers' preferences. Targeted marketing, powered by customer data, enhances engagement, conversion rates, and overall marketing return on investment (ROI).
3. **Forecasting:** AI serves as a valuable tool for predictive analytics and forecasting. Predictive analytics utilizes data from past customer interactions to anticipate their future actions. When applied to larger audience segments and scaled up, AI can also forecast business metrics such as revenue outcomes, providing valuable insights for strategic decision-making.

V Need of Conforming AI as a Marketing Strategy

Effective marketing strategy will need the right decisions to make a company successful online. To achieve a successful marketing strategy, it is necessary to follow upon new social trends and keep interacting with the client. Therefore, the power of artificial intelligence systems in digital marketing strategies enables a marketer to request his products or services, and succeed in his business operations. In recent years, AI has moved retailing forward in many ways, such as making big data available for prediction, facilitating more informed retail and consumption decisions, enabling visual display and merchandise, and creating customer engagement. AI also is rapidly gaining popularity and importance in the more general marketing area. On the practice

side, many marketing functions¹ have deployed AI applications, such as robots for consumer greeting, big data analytics for price adjustment and prediction, recommender systems for product and promotional personalization, natural language processing for customer engagement and in-store experience optimization, and sentiment analysis for customer satisfaction tracking, among others.

Conclusion

We have to develop one-on-one connections with the consumer. That is the need of the hour; that is what will make us survive in the new world. Marketing, at its core, is about the mind and heart. It is about intelligence and emotion. Though we have to give the functional benefits, we also have to enthrall the emotional space in the minds of the consumers. The way it has been communicated with consumers has changed marketing. It is morphing every day and that is where the big shift has happened.

The big change that is happening in marketing are artificial intelligence and machine literacy. This creates new openings for fabricator and marketing. It will change how people interact with information, technology, brands, and services. Therefore, marketers must acclimatize artificial intelligence systems in their marketing strategies to succeed in the present period of digital marketing. It saves both time and plutocrat for the marketers, guests, and prospects, and occupies the minds of guests without mortal intervention.

References

1. AFI Alliance for Financial Inclusion. (2010) G20 Principles for Innovative Financial Inclusion : 2-3
2. [http://www.gpfi.org/sites/default/files/documents/G20%20Principles%20for%20Innovative%20Financial%20Inclusion%20-](http://www.gpfi.org/sites/default/files/documents/G20%20Principles%20for%20Innovative%20Financial%20Inclusion%20-%20AFI%20brochure.pdf)
3. [%20AFI%20brochure.pdf](#) (Access Date: 19.04.2015).
4. Artigas, J.C. (February 2010). Linking global money supply to gold and to future inflation. World Gold Council, Gold:Report, WGC-US-INVE003, 2. New York: World Gold Trust Services, LLC.

5. BIS (07 February 2015). Global liquidity: selected indicators. Bank for International Settlements, Statistics.
6. http://www.bis.org/statistics/gli/gli_feb15.pdf (Access Date: 19.04.2015).
7. BIS (07 February 2015). Amounts outstanding of over-the-counter (OTC) derivatives by risk category and instrument. Bank for International
8. Settlements, Statistics, BIS Quartlery Review. <http://www.bis.org/statistics/dt1920a.pdf>
9. Bischoff, R., & Guhl, T. (2010). The strategic research agenda for robotics in europe [industrial activities]. Robotics & Automation Magazine,IEEE, 17(1), 15-16.(Access Date: 19.04.2015).
10. CGAP & WB. (September 2010). Financial Access 2010. The state of financial inclusion through the crisis. Consultative Group to Assist the Poor / The World Bank Group. United States of America : 5-11
11. Davenport, C. (17 February 2015). Americans want rich guys like Elon Musk to pay for space travel — not taxpayers. The Washington Post Newspaper, Blog. http://www.washingtonpost.com/blogs/the-switch/wp/2015/02/17/americans-want-rich-guys-like-elon-musk-to-pay-forspace-travel-not-taxpayers/?tid=sm_fb
12. Davies, J.C. (February 1962). Toward a theory of revolution. American Sociological Review. Vol. 27, No.1., 5.California Institute of Technology