

A Study on the Adoption of Artificial Intelligence in Relationship Management Enhancing Customer Satisfaction

Dr. (Mrs) Vaishali Nadkarni and Rathod Mansi Jesing

The Byramjee Jeejeebhoy College of Commerce, Mumbai, Maharashtra

Abstract: Artificial Intelligence in a regular mode of learning is known as a computer system that simulates human intelligence. Most of the activities or tasks are performed by the machine with the installation of human intelligence, as it helps to solve deviations, problem-solving, reasoning, learning, and so on. AI is a machine that is set and framed with a set of rules and algorithms. This AI machine has the power to assess the various procedures laid with the available system and can attain any specific task assigned without any external interference.

This invention of Artificial Intelligence is of a great domain and still needs to be explored. In a real lifetime, experiences in real-world applications to date are undoubtedly at the tip of the iceberg. However, in the past few years, there has been robust growth in the AI domain and will serve as one of the most rewarding industries. However, the researcher in this article is trying to comprehend how significant is the adoption of Artificial Intelligence on Relationship Management on enhancing customer satisfaction. Further, the researcher is also trying to evaluate does the adoption of Artificial Intelligence impacts firm profitability.

Keywords: Artificial Intelligence, Growth, Profitability, Human Intelligence

I. INTRODUCTION

Artificial intelligence being a great domain in today's technological sector is well found and has revolutionized various industries improving their efficiency, production, enhanced services, and innovative solutions. AI provide timely services through its automation and intelligent algorithms, leading to improved customer satisfaction. AI is rapidly evolving and is opening up new avenues for business. This dynamism allows organizations to adapt landscape and incorporate cutting-edge solutions. AI contributes significantly to the growth of businesses, through increased efficiency, reduced cost, and focus on the improvement of new brands and services. Organization that embrace AI and leverage its capabilities are more likely to stay in this competitive business environment. The adaptability to technological advancements is crucial for maintain relevance in the rapidly changing business environment. With the use of AI now there are certain fear factors in the industry such as losing jobs, process opaqueness and reducing customer loyalty, which are a matter of great concern, being aware organizations need to proactively address them and mitigate negative impacts. Accenture in its report concluded AI has boosted the profitability by an average of 38% by 2035 and led to economic boost of US\$14 trillion across 16 industries. The Global survey of Artificial Intelligence report presented by McKinsey, stated that Organizations are using AI as a tool for generating value which is earned in the form of revenues. It adds that organizations are planning to invest more in AI to COVID-19 pandemic and the digital transformation acceleration. In 2015, Gartner predicted that AI may account for \$127 billion by 2025 compared to \$2 billion six years ago. In the recent report of 2021 (Gartner Second Annual Emerging Technology Product Leaders Survey), it states that 33% of technology providers plan to invest \$1 million or more in AI within two years. However, countries like China, Hongkong, Isarel, Japan, Singapore, the U.K and the US were involved in upgrading their organizations portfolio when it comes to emerging technology, with wide revenue for fiscal year 2020 of \$10 million or more.

II. REVIEW OF LITERATURE

Nazmun Nessa Moon et.al (2021), stated that technology is now a boon or bane and is a matter of concern. With this growing use of technology, people are observed to be more dependent on online shopping. While shopping online the factors that majorly impact consumer intent, security, privacy, and trust. Factors that lead to satisfaction through online mode are building trust, payment gateways, money-back policies, etc. In this technology-driven, businesses need to be apprehensive about upgrading their online services to attract buyers for online purchases.

Wamba-Taguimdje. S. L., et.al (2020), conclude that if AI is optimally utilized by an organization, it will enhance the existing processes, improve automation, information, and transformation as well as also able to interact with humans. AI if effectively utilized with help to improve the performance of the businesses and process level. If these AI attributes are built, businesses can sustain and increase the value of their transformation projects.

Neha Sonia., et.al (2018), opined that the maximum use of AI and Algorithms helps businesses to increase productivity, reduce cost, reduction of human errors, problem-solving, quicker decision-making, understand customer preferences to predictions, and many more. Recently, an investment in AI is showing an upward trend as it helps the business to recognize changing business trends.

Ann Geisel., (2018), in her research paper, focuses on how AI is different for different levels and categories of people. She states that AI carries risk at all levels, irrespective of hierarchy. At the lower level, it bears maximum risk as individual needs to change their skill set to retain their employment, whereas at a higher level could pose a danger to humanity. Businesses, organizations, and society need to learn and grow with AI to remain competitive, as technology continues to grow, and evolve, and concern for sustainability.

Odoh, Longinus Chukwudi., et.al. (2018), opined that in the recent digital environment, AI plays a very significant role in maintaining accounting standards. It aims to solve a fundamental business problem and it positively impacts the performance of accounting functions. AI will ultimately help businesses, by providing an opportunity to rebrand, reengineer, and radically improve the quality of the products and services. It helps to improve the business decisions along with the investment of the businesses. The tedious and repetitive tasks are now shifted to machines for effective and efficient accounting and auditing operations.

Naik A. Darshana et.al (2020), in their research paper highlight how data management can assist organizations in the effective implementation of CRM objectives and engaging customer management. The researchers have tried to utilize customer databases to improve customer knowledge and help organizations reframe, design, and develop different marketing strategies. The researcher has applied a value-based customer segmentation approach adding more value to the existing and potential customers.

Chatterjee, S., et.al., (2022) stated that the adoption of AI in building customer relationship management in the B2B context positively impacts a firm's performance. With the help of AI, the researcher has focussed on improving the B2B relationship management in the changing business dynamics.

Objective of the Study

1. To evaluate the significant impact of Artificial Intelligence on Relationship Management on enhancing customer satisfaction.
2. To study does the adoption of Artificial Intelligence impacts firm profitability

To evaluate the Significant Impact of Artificial Intelligence on Relationship Management on Enhancing Customer Satisfaction.

Artificial Intelligence is now used as a business tool enabling businesses to make appropriate decisions related to customer satisfaction based on near real-time. Customer needs and wants related to products, and platforms, can leverage insights from industry data to take necessary measures. Adoption of this AI approach helps the software and product manager to shape the new tools required for the business to satisfy the customer. The adoption of AI enables businesses to maintain huge customer data, process competencies, and offer a wide range of products and services. It supports businesses at every stage of product development reducing the lengthy timeline from idea to market and from market to customer. Small businesses, entrepreneurs, or big businesses make use of this technology to the fullest, building their experiences, reducing complexity, and delivering new value products to the customer. This approach of AI

AI tools are widely used by businesses to access the information that is widely accessible and oftentimes at a relatively lower cost brings a return on investment by satisfying their customer. Usage of AI tools helps the business to prepare market content, and creativity, understand the desired task, and excel in their performance, further, it is also stated that it is a tool for any business to flourish and not a perfect solution to any problem that will expedite the pathway of success. (Fatemi 2019) states that AI acts as a boon to enrich their work portfolio and not replace any sales representatives. With the help of AI sales personnel need to upgrade their skill and competencies to sustain themselves in this competitive environment. It (AI) helps to segment different consumer databases and store them on various AI applications (Chabot's, email, calls, etc.) which can be retrieved when required.

Due to online shopping, it now becomes difficult for many sales personnel to connect with customers and build a strong bond and trust, however, AI has provided us with a powerful tool i.e. through sentimental analysis, they can easily evaluate the conversation and emotional situation the best example is cogito, which provides in-call voice analysis, resulting in the sales personnel are now able to respond to them in a best possible manner by satisfying their requirement or query. AI helps to eliminate duplication of work and report errors if any, likewise, it also helps to identify incomplete data and suggest upgrading the same (Dilmengani, 2021)

TO STUDY DOES THE ADOPTION OF ARTIFICIAL INTELLIGENCE IMPACTS FIRM PROFITABILITY

It is observed that AI includes a wide range of technologies; machine translations, Chatbots, and self-learning algorithms that enable the organization to understand the changing business environment and act accordingly. AI is being fully utilized by the organization, optimizing its existing process and focusing on improving automation, customer database, information, and interactions with humans. It benefits the organization more specifically in its ability to manage the business and performance at both the organizational and process levels. It can focus on building AI attributes to enhance their decided projects' business value. (Wamba-Taguimdje, et al., 2020) the research found a positive relationship between AI and firm value while significantly impacting a firm's cost structure (Taekyun Kim., et al., 2022). The research demonstrates that using AI reduces the cost of expenses but increases salaries and wages. Secondly, AI negatively correlates with the gross operating efficiency of the firm, but has a positive correlation with net efficiency such as return on sales, return on marketing investments, and net profit per employee. (Mishra, S., et al., 2022) reveals that AI facilitates the organization to generate accurate predictions and assist marketing sales personnel in making accurate decisions which in turn, improves business performance. (Ma and Sun 2020)

III. CONCLUSION

There is a need for collective intelligence, and instead of letting every single decision become automated, it would be more beneficial to share tasks encouraging societal support as well. AI should be considered as a tool for improving decision-making rather than automation enhancing sensing capability which only humans can provide, as machines cannot fully capture this ability. These factors gave rise to two ways, the process of thinking about the future of marketers. AI will bring a humungous change in marketing soon for which we need well-trained and skilled manpower in this technologically driven market. Automation will eventually lead to a reduction in the tasks of marketing managers and reduce their demand over the longer run. However, the researcher would like to conclude that there is a need to have escalation rather than automation so the importance of the market manager role can never be overtaken fully.

BIBLIOGRAPHY

- [1]. Nazmun Nessa Moon., Iftakhar Mohammad Talha., Imrus Salehin, (2021), "An Advanced Intelligence system in Customer Online Shopping Behaviour and Satisfaction Analysis", *Current Research in Behavioural Sciences* 2(2021), 100051, www.elsevier.com/locate/crbeha
- [2]. Wamba-Taguimdje. S. L., Fosso Wamba, S., Kala Kamdjoug, J.R., Tchatchouang Wanko, C.E. (2020), "Influence of Artificial Intelligence(AI) on firm performance: the business value of AI based transformation projects", *Business Process Management Journal*, Vol. 26, No 7, pp. 1893-1924, ISSN- 1463-7154, DOI: <http://doi.org/10.1108/BPMJ-10-2019-0411>.
- [3]. Neha Sonia , Enakshi Khular Sharmaa , Narotam Singhb , Amita Kapoor., (2018) "Impact of Artificial Intelligence on Business", <https://www.researchgate.net/publication/32564498>

- [4]. Ann Geisel, (2018), The Current and Future Impact of Artificial Intelligence on Business, INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH VOLUME 7, ISSUE 5, MAY 2018 ISSN 2277-8616.
- [5]. Odoh, Longinus Chukwudi., Silas C. Echefu. , Ugwuanyi, Uche Boniface., Chukwuani, Nnenna Victoria .,(2018), “ Effect of Artificial Intelligence on the Performance of Accounting Operations among Accounting Firms in South East Nigeria”, Asian Journal of Economics, Business and Accounting 7(2): 1-11, 2018; Article no.AJEBA.41641 ISSN: 2456-639X
- [6]. Darshana A Naik, Vivek K M, Seema S, (2020), The Feasible Infrastructure of Customer Segregation using Data Mining Approach, Indian Journal of Artificial Intelligence and Neural Networking (IJAINN) ISSN: 2582-7626 (Online), Volume-1 Issue-1 December 2020
- [7]. Iain M. Cockburn Rebecca Henderson Scott Stern, (2018), THE IMPACT OF ARTIFICIAL INTELLIGENCE ON INNOVATION Working Paper 24449 <http://www.nber.org/papers/w24449>
- [8]. Chatterjee, S., Chaudhuri, R., & Vrontis, D. (2022). AI and digitalization in relationship management: Impact of adopting AI-embedded CRM system. *Journal of Business Research*, 150, 437-450.
- [9]. Rane, N. (2023). Enhancing Customer Loyalty through Artificial Intelligence (AI), Internet of Things (IoT), and Big Data Technologies: Improving Customer Satisfaction, Engagement, Relationship, and Experience. *Internet of Things (IoT), and Big Data Technologies: Improving Customer Satisfaction, Engagement, Relationship, and Experience (October 13, 2023)*.
- [10]. Fatemi, F. (2019, August 10). 5 Ways Artificial Intelligence Is Transforming CRMs. Retrieved from Forbes: <https://www.forbes.com/sites/falonfatemi/2019/08/10/5-ways-artificialintelligence-is-transforming-crms/?sh=8e4810e53546>
- [11]. Dilmengani, C. (2021, January 1). AI-powered CRM Systems in 2021: In-Depth Guide. Retrieved from AI Multiple: <https://research.aimultiple.com/crm-ai/>
- [12]. Wamba-Taguimdje, Serge-Lopez & Fosso Wamba, Samuel & Jean Robert, Kala Kamdjoug & Tchatchouang, Chris Emmanuel. (2020). Influence of Artificial Intelligence (AI) on Firm Performance: The Business Value of AI-based Transformation Projects. *Business Process Management Journal*, [researchgate.net/publication/340210939_Influence_of_Artificial_Intelligence_AI_on_Firm_Performance_The_Business_Value_of_AI-based_Transformation_Projects](https://www.researchgate.net/publication/340210939_Influence_of_Artificial_Intelligence_AI_on_Firm_Performance_The_Business_Value_of_AI-based_Transformation_Projects)
- [13]. Taekyun Kim; Yejin Park; Wonjoon Kim 2022 Portland International Conference on Management of Engineering and Technology (PICMET) DOI: 10.23919/PICMET53225.20227-11 Aug. 2022
- [14]. Mishra, S., Ewing, M.T. & Cooper, H.B. Artificial intelligence focus and firm performance. *J. of the Acad. Mark. Sci.* **50**, 1176–1197 (2022). <https://doi.org/10.1007/s11747-022-00876-5>
- [15]. <https://www.forbes.com/sites/forbestechcouncil/2023/10/26/enhancing-customer-satisfaction-the-ai-centric-approach/?sh=6a73b9d83053>