



## Chapter 5

# Unlocking the Power of Artificial Intelligence and Machine Learning in Transforming Marketing as We Know It


**Thangaraja Arumugam**

 <https://orcid.org/0000-0001-5496-7258>  
Vellore Institute of Technology, Chennai, India


**Kiran Kumar Thoti**

 <https://orcid.org/0000-0002-6678-9425>  
Universiti Malaysia Kelanta, Malaysia


**R. Arun**

 <https://orcid.org/0000-0002-5252-1030>  
St. Joseph's College of Engineering, India

**P. Shanthi**

 <https://orcid.org/0000-0002-9998-5940>  
SRM Institute of Science and Technology, India

**Sundarapandiyan Natarajan**

 <https://orcid.org/0000-0002-1303-2947>  
Adithya Institute of Technology, India

**Uday Kiran Kommuri**

Vellore Institute of Technology, Chennai, India

### ABSTRACT

*Technological changes have helped the methodology of execution where we can examine the sector in addition to the manner enterprise is carried out. Productive development has facilitated correct manufacturing in large volumes. The advanced technology, together with information in analytics, smart devices, computerization, and artificial intelligence (AI), is converting the system of society and persons to interact on a basic level. The evolution and development of artificial intelligence (AI) have transformed the effectiveness of commercial enterprises globally. However, business adoption of AI-based total packages by businesses remains constrained because of a lack of know-how approximately the generation. The technology can assist the organisation in understanding the clients and permit it to target the customers better and personalize advertising and marketing movements and messages. Advertising takes the benefit of facts to big data: consumer needs research, marketplace analyses, client insights, and competition intelligence.*

DOI: 10.4018/979-8-3693-0049-7.ch005

## **1. INTRODUCTION**

The introduction of Artificial intelligence technologies has given a better rate of return on investment (ROI) for selling organization campaigns by exploiting ML, huge information problem-solving methods, and different processes towards realizing the insight interested in anticipation of the target market. The manufacturers produce additional convincing in client touch points. The fascinating online promotion provides consumer sustenance; AI makes additional customized consumer interaction, eliminating abundant speculation (Vesanen, 2007). AI is currently employed by online sellers to automate the process that was solely performed by employees; content-oriented creation, in addition to net style, is entirely beneath the extent of AI in marketing (Kiran & Arumugam, 2020). Artificial Intelligence and mechanization have entirely remodeled varied commerce aspects in promoting (Vesanen & Raulas, 2006). The commencing plan to implementation, the footprint of AI is all over in spite of the complexity and challenges related to being hooked into technology. Another viewpoint on AI holds that it constitutes predictive technology built on ML that is used to generate judgments, forecasts, and recommendations for real-world or hypothetical situations. However, ML-based AI has several drawbacks, such as the tendency to forecast the future based on historical data by identifying patterns (Adams, 2017).

For marketing and in the main online selling in the present day, the AI platform has proved to be an effective system in every business. AI platform has bridged the breach by linking information systematically in addition to tactical implementation. Modern marketers can make sure AI is a trade benefit in shaping the market scale. As Suggested by Mage Plaza, Artificial intelligence can, across the market touch point, be employed in machine learning, customer information, and different machine ideas to forecast individual activity and also in decision-making systems. The advancement in technology will control large amounts of information (Adomavicius & Tuzhilin, 2005).

Through information on the market in an exceedingly much-simplified form, marketers will additionally break it all the way down to produce tailor-made content for his or her audience. Through Artificial Intelligence, businesses can develop better promoting analytical methods in focusing on correct prospective consumers. This will allow online sellers to feed clients with accurate information on the acceptable means at the simplest time to market (Arthanari & Jambulingam, 2020). Marketers are able to instantly examine enormous quantities of marketing data from various platforms, including websites, social media, and emails. Additionally, their ability to comprehend client demands and expectations more rapidly enables them to increase campaign success and generate a return on investment (also known as ROI). As a result, marketers can focus their energy and time on tasks that are equally important or more critical. Another justification for AI's inclusion in marketing plans is the fact that, in recent decades, it has become vital for companies to understand and recognize customers' standards and preferences for both goods and services.

Artificial intelligence companies embrace installations, integrating, in addition to maintenance and backing accomplishments. The phase proposed is expanding in a major charge within the Automation markets above the predicted stage. Artificial intelligence platform consists of chipsets that are similar to Graphic Process systems, Computerised Process systems, Application-specific incorporated Circuits and Field-Programmable gate array systems. Presently, the Artificial Intelligence platform market is dominated by Graphic Process systems and Computerised Process systems for the reason that their elevated computing capability is essential for the Artificial intelligence framework (Lotz et al., 2010).

Customer journey is becoming increasingly complex. At the same time, marketing is gaining momentum at the management table, with highly record technology budgets expected to exceed those of

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/unlocking-the-power-of-artificial-intelligence-and-machine-learning-in-transforming-marketing-as-we-know-it/334736](http://www.igi-global.com/chapter/unlocking-the-power-of-artificial-intelligence-and-machine-learning-in-transforming-marketing-as-we-know-it/334736)

## Related Content

---

### An Overview of IoT Infrastructure Architecture, Enabling Technologies, Issues, Integration of Cloud, and Simulation Tools

Mobasshir Mahbub (2022). *Emerging Trends in IoT and Integration with Data Science, Cloud Computing, and Big Data Analytics* (pp. 20-38).

[www.irma-international.org/chapter/an-overview-of-iot-infrastructure-architecture-enabling-technologies-issues-integration-of-cloud-and-simulation-tools/290073](http://www.irma-international.org/chapter/an-overview-of-iot-infrastructure-architecture-enabling-technologies-issues-integration-of-cloud-and-simulation-tools/290073)

### Opportunistic Edge Computing Architecture for Smart Healthcare Systems

Nivethitha V. and Aghila G. (2022). *Research Anthology on Edge Computing Protocols, Applications, and Integration* (pp. 321-338).

[www.irma-international.org/chapter/opportunistic-edge-computing-architecture-for-smart-healthcare-systems/304309](http://www.irma-international.org/chapter/opportunistic-edge-computing-architecture-for-smart-healthcare-systems/304309)

### Prospects for the Implementation of Practice-Based Learning for Students of Managerial Profile

Liudmyla Ilich, Igor Yakovenko, Olena Akilina, Alla Panchenko and Marzena Sobczak-Michalowska (2024). *Applications of Synthetic High Dimensional Data* (pp. 146-161).

[www.irma-international.org/chapter/prospects-for-the-implementation-of-practice-based-learning-for-students-of-managerial-profile/342990](http://www.irma-international.org/chapter/prospects-for-the-implementation-of-practice-based-learning-for-students-of-managerial-profile/342990)

### Artificial Intelligence Impacts on Industry 4.0: A Literature-Based Study

Shyam Sunder Gupta, Rajeev Goyal and Deepak Gupta (2023). *Handbook of Research on Data Science and Cybersecurity Innovations in Industry 4.0 Technologies* (pp. 30-44).

[www.irma-international.org/chapter/artificial-intelligence-impacts-on-industry-40/331002](http://www.irma-international.org/chapter/artificial-intelligence-impacts-on-industry-40/331002)

### Blockchain Technology: A Review of the Contemporary Disruptive Business Applications

Tarek Taha Kandil, Shereen Nassar and Mohamed Taysir (2021). *Research Anthology on Blockchain Technology in Business, Healthcare, Education, and Government* (pp. 1061-1084).

[www.irma-international.org/chapter/blockchain-technology/268648](http://www.irma-international.org/chapter/blockchain-technology/268648)