

Impact of artificial intelligence on marketing

Mahabub Basha

Department of Commerce IIBS, Bangalore

Corresponding Author: Mahabub Basha shaiks86@gmail.com

ARTICLEINFO

Keywords: Artificial Intelligence, Strategic Marketing, Artificial Intelligence Marketing, Competitive Advantage

Received: 05, January Revised: 10, February Accepted: 15, March

©2023 Basha: This is an open-access article distributed under the terms of the <u>Creative Commons Atribusi 4.0</u> <u>Internasional</u>.



ABSTRACT

The evolution of artificial intelligence (AI) has drastically changed the dynamics of today's business world. One of the most significant applications of AI is in the field of marketing, which assists in enhancing performance. The current research aims at finding out the impact of AI in marketing. A thorough literature research was highlighted, providing a strong knowledge of AI and its use in marketing. Second, the researcher employed a qualitative study strategy that included semi-structured interviews with marketing professionals from several Indian companies. The researcher chose a sample size of fifteen marketing experts to interview. The study's findings emphasise the elements that influence AI integration in marketing, the benefits and obstacles of AI integration in marketing, as well as your company's pre and post AI marketing strategy, ethical considerations, and use of AI in the marketing industry. The study proposes integrating AI into marketing tasks in order to improve corporate performance and, as a result, achieve profitability and competitive advantage. study also contributes to strategic marketing research by identifying research gaps that bridge strategic AI marketing practise and research in a systematic and rigorous manner.

DOI prefix: https://doi.org/10.55927/eajmr.v2i3.3112

ISSN-E: 2828-1519

https://journal.yp3a.org/index.php/eajmr

INTRODUCTION

Artificial Intelligence Marketing (AIM) is a strategy for maximising the use of technology and market data in order to improve the customer experience (Jain and Aggarwal, 2020). By analysing large amounts of data, AI can bridge the gap between data science and implementation, which previously been an impossible task (T.Thiraviyam, 2018). Marketing encompasses all techniques that can have a large influence on people at a certain time, in a specific location, and through a specific channel. The advancement of digital marketing as an industry is the result of integrating big data with academic scientific study on intelligent systems. (Gkikas and Theodoridis, 2019). The internet of things (IoT), data science, cloud computing, big data, artificial intelligence (AI), and block chain are all technological innovations that are transforming the way we live, work, and play. Further development of these technologies might lead to hyper automation and mega networking, ushering in the Fourth Industrial Revolution (or Industry 4.0). (Bloem 2014; Klosters 2016; Schwab 2017; Park 2017; Soni Neha et al. 2019). Artificial Intelligence (AI) assists marketers in achieving complete personalisation and relevance. It will eventually accomplish communication at scale with platforms like Search, Facebook, YouTube, and Google reaching billions of people every day, as well as digital ad networks. The future holds the application and implementation of Artificial Intelligence (Savica Dimitrieska et al., 2018). With the growth of AI, the world of marketing is evolving swiftly and will continue to do the same.

The speed with which this transition occurs will alter the general landscape of marketing in academia, research, and the commercial world. Organizations will have a significant difficulty in adapting to the shifting environment of marketing. With the introduction of new technologies, businesses will need to train their personnel on a regular basis. Working with AI is no longer considered science fiction, but rather a reality that will become a need for existence (Shahid and Li, 2019). To be ready for the near future, marketing workers must comprehend and learn how to strengthen and match their abilities for AI and robotics. The current situation is both fascinating and problematic. The influence of AI on marketing will be examined through the eyes of marketing professionals in Prayagraj, India.

Artificial intelligence (AI) is transforming the marketing environment and will entirely change it in the near future. Despite the fact that marketing is one of the most important commercial uses of AI today, and early adopters are striving to build value from it (Bughin et al. (2017)), there is a paucity of literature on this topic when two disciplines are integrated (Wierenga, 2010). Artificial intelligence (AI) is used in a variety of business processes across numerous functional domains and business operations. One of them is marketing, which is regarded as the business's heart.

Artificial intelligence (AI) is transforming the marketing environment and will entirely change it in the near future (Shahid and Li, 2019). Wierenga (2010) also mentioned that there aren't enough publications on AI in marketing and AI in marketing literature. As per Martnez-López & Casillas (2013), Scopus has less than 50 publications in business journals linked to marketing and AI.

Following then, the amount of study on the issue in Scopus rose, although it is still under 100. More studies on the influence of AI on marketing are needed, according to Martnez-López & Casillas (2013), because there is a paucity of study in the literature and the potential of the combination in making marketing choices. The study will look at this critical topic through the eyes of a marketing professional in Prayagraj, India.

THEORETICAL REVIEW

There is a paucity of marketing literature on AI, leading our attempt to offer a framework that defines both where AI is now and how it is expected to evolve. Although prior concepts and principles have been investigated to address marketing-related issues for a long time (Wierenga & Bruggen, 2000), the widespread use and deployment of AI in marketing has only recently emerged (Wierenga, 2010).

Although AI has been applied in the majority of firms in today's world, there is still a lack of high-level implementation in many companies. Various marketers have shown an interest in using AI in the near future, with almost all of them prepared to do so fully. In contrast, just 20% of marketers used one or more AI solutions in their businesses in 2017. (Bughin, McCarthy & Chui, 2017). Marketers want to utilise AI in areas such as segmentation and analytics (all of which are connected to marketing strategy), as well as messaging, customization, and predictive behaviours (all of which are related to consumer behaviour) (Columbus 2019; Davenport Thomas et al. 2019). Artificial intelligence (AI) is the intelligence displayed by machines, unlike human intelligence. Artificial intelligence is represented by a system of intelligent agent machines that observes the environment and achieves its purpose (Sanjeev Verma et al., 2021). The implication of AI is required to assess client behaviours, purchases, likes, dislikes, and various other factors, (Chatterjee et al., 2019).

Artificial Intelligence has emerged as a panacea for small-scale businesses in the period of globalisation, as it has allowed thesm to become worldwide and do business through the internet. Artificial intelligence (AI) has the potential to assist marketing managers with a variety of tasks, including lead generation, market research, social media management, and user experience personalization (Sterne, 2017). Artificial intelligence has grown in a highly efficient and useful way in the globalised commercial climate (Parasmehak Khokhar & Chitsimran, 2019). Artificial intelligence (AI) has grown in importance in virtually every field in the twenty-first century, including engineering, scientific knowledge, education, medical science, business, accounting, finance, marketing, economics, stock market, and law (Halal (2003), Masnikosa (1998), Metaxiotis et al. (2003), Raynor (2000), Stefanuk and Zhozhikashvili (2002), Tay and Ho (1992), and Wongpinunwatana et al. (2000), T. Thiraviyam, 2018.

METHODOLOGY

The researcher used a qualitative research approach to carry out this study. The qualitative technique is essentially exploratory research that is used

to learn about the causes, viewpoints, and opinions in order to address the study topic. Because the goal of the study is to learn about the influence of AI on marketing from the perspective of marketing experts, qualitative research is the ideal option. The research will use both primary and secondary sources to acquire data. The researcher acquired primary to answer the study's questions, and this information was obtained using the interview technique. As a secondary data source, many publications, journals, books, websites, and blogs are included.

Interviews are performed with marketing specialists from Indian businesses. A sample size of fifteen participants was chosen, and interviews were performed with fifteen Indian marketing experts. Purposive sampling was utilised by the researcher, which means that respondents were included in the study for a specified reason.

The primary criterion for inclusion in the study was that respondents must work for a firm that uses AI in the marketing department. The reasoning behind this was that marketers who had firsthand experience with AI deployment would be able to offer a more accurate assessment of AI's influence on marketing.

The interview approach was used, with the respondents being asked a series of open-ended questions. However, in order to follow the inductive research approach, where current hypotheses are not limited, the researcher was prepared to add new questions to the interview based on the circumstances. Because the study is cross-sectional in design, the data from the respondents will be collected over the course of one month.

RESULTS AND DISCUSSION

The analysis of the data obtained from the research respondents is offered in this part. In total, fifteen marketing experts from 10 different Indian firms were interviewed. Table 1 gives an overview of the responder profile.

Respondents	City-Country	Industry	Position	Years Of
				Experience
Respondent 1	Bangalore,	Electronics	Marketing	5years
	India		Director	
Respondent 2	Bangalore,	Consumer	Marketing	3 years
	India	Goods	Manager	
Respondent 3	Bangalore,	IT	Marketing	4 years
	India		Executive	
Respondent 4	Bangalore,	Electronics	Head of	7 years
	India		Marketing	
Respondent 5	Bangalore,	Electronics	Marketing	4 years
	India		Specialist	
Respondent 6	Bangalore,	Consumer	Marketing	3 years
	India	Goods	Executive	
Respondent 7	Bangalore,	Consumer	Marketing	6 years
	India	Goods	Director	

Respondent 8	Bangalore,	Consumer	Marketing	4 years
_	India	Goods	Specialist	
Respondent 9	Bangalore,	IT	Head of	9 years
	India		Marketing	
Respondent 10	Bangalore,	IT	Marketing	3 years
	India		Manager	
Respondent 11	Bangalore,	Electronics	Marketing	3 years
	India		Executive	
Respondent 12	Bangalore,	Consumer	Head of	8 years
	India	Goods	Marketing	
Respondent 13	Bangalore,	Consumer	Assistant	2 years
	India	Goods	Marketing	
			Manager	
Respondent 14	Bangalore,	Electronics	Marketing	5 years
	India		Manager	
Respondent 15	Bangalore,	IT	Marketing	7 years
	India		Director	

Table 1. Profile of the Respondents

Interview Analysis

This section delves into the details of the interview. The following are the main interview questions, which are discussed in depth in this section:

- ❖ What elements play a role in incorporating AI into marketing?
- ❖ What are the main advantages of using AI into marketing?
- ❖ What are the main obstacles in incorporating AI into marketing?
- ❖ What are the ethical implications of incorporating artificial intelligence into marketing?
- ❖ What role does AI play in your company's marketing functions?
- ❖ What is your company's pre-AI and post-AI marketing strategy?

1. Influencing Factors In Integrating AI In Marketing

The primary influential element in incorporating AI in marketing, according to the respondents, is competitive pressure. Many businesses are feeling the push from competitors to include AI into their marketing strategies. Respondent 1 stated, "There is a sense of urgency among competitive organisations to integrate AI into the marketing process." According to Respondent 2, he has noted that the company's management has began to push for AI integration in marketing, citing media attention, competitive pressure, and digital maturity as reasons for their desire to do so. Respondent 3 mentioned external and competition pressure, as well as the hoopla around AI integration in marketing tasks. "Firms are now talking about this major phenomena and utilising it in their marketing functions," he said. The pressure from rivals is a big element, as the corporation understood that in order to stand out from the competition, they must integrate AI into their marketing operations." Consumers' pressure was not visible, but Respondent 4 noted that the company recognised that customers sought for companies with the finest

services and performance, thus they felt compelled to include AI-related technologies.

2. Benefits of Artificial Intelligence in Marketing

When questioned about the advantages of using AI into marketing, respondents gave a variety of answers. Respondent 5 and 6 felt that incorporating AI into marketing operations would help the company increase efficiency and save time in the marketing functions, and it is now clear that AI assisted the company in improving marketing processes.

According to Respondent 7, the advantages of implementing AI-based software in our firm included increased conversion rates, a better grasp of consumer data, and the ability to make more informed marketing decisions. Most significantly, it aided in enhancing the return on investment. The advantages of AI integration, according to Respondent 8, include insights and marketing decisions. The main benefit of AI adoption in marketing, according to Respondent 9, is the insights. The AI-based software's findings may be used to a variety of operations, including pricing and new product creation. According to Respondent !0, the main benefit of using AI-based software in marketing is that it allows the firm to deliver better service and provide more value to clients, resulting in the highest degree of customer satisfaction. Improved data analysis and efficient marketing operations are among the other advantages.

3. Major challenges of AI Integration in Marketing

According to the responses, technical compatibility is the most difficult aspect of AI integration. In order to address the compatibility issue, 11 said the business worked on making it simple to integrate their system with major CRM systems. It remains a huge problem for us, and the organisation has been trying to improve the process on a constant basis. Complex software and IT systems, according to Respondent 12, are also a huge obstacle. As a result, it is critical for businesses to focus on compatibility concerns.

Four respondents said the largest issue for overall marketing operations following AI integration is a lack of technical capabilities in a team. According to Respondent 13, the organisation has to train its marketing team in order to get them ready for AI adoption. Adoption of new technology in a firm is undoubtedly a transformational process, and it is critical to recognise and address the problems ahead of time. Companies should not be hesitant to adopt new technologies if they want to gain a competitive edge. Respondents also felt that having data in place is critical since it is the most significant aspect of AI; consequently, data is also the largest hurdle, according to them.

4. Ethical Aspect of AI in Marketing

According to the respondents, data is the most important ethical factor to consider when dealing with clients. According to Respondent 14 in order to tackle this problem, the firm collects data anonymously; this means that the data is not linked to the users who create it. According to Respondent 15, their main goal is to offer a small quantity of personal information. Respondent 13 discussed two separate ethical implications of artificial intelligence in marketing. Ethical problems, she feels, should be examined since they are extremely essential, but she believes that firms do not consider them when

planning to use knowledge-driven AI software. The use of data in the marketing environment is a crucial component of ethics.

Second, even the development team finds it difficult to comprehend the decision to use AI. If a corporation does not examine the immoral decisions taken, this might become the most difficult task. Data, according to Respondent 15, is the most ethical component of AI in marketing, and it must be considered throughout the process. She added that the firm had considered the ethical implications of the new system before implementing it, and that the company's core policy was not to collect personal information from clients. She went on to say that it's critical to disclose any ethical concerns to the buyer. As a result, our organisation informs the consumer about the sort of data that will be acquired from them.

5. Usage of AI in marketing functions

According to the respondents, AI has improved the effectiveness of marketing functions and is now employed in virtually all major marketing operations. According to them, AI aids in the development of sales and marketing strategies that result in significant gains in corporate performance. AI has been employed in all marketing-related tasks, including pricing, promotion, distribution, and product planning and development, according to Respondent 8. According to Respondent 12, AI is mostly employed in the digital platform, advertising, and customer relationship management .As per to Respondent 5, AI is widely employed in digital marketing, including content curation, email marketing, digital advertising, web design, chatbots, and predictive analysis.

6. Pre and post AI marketing strategy

The application of AI in marketing does, in fact, alter the dynamics of the total business. Similarly, it affects the company's strategies. According to Respondent 7, prior to implementing AI in marketing, the focus was on increasing marketing resources and expanding product offerings.

Following the adoption of AI, marketing managers were drawn to business intelligence, which provided them with a better grasp of marketing, sales, and operations trends. They created predictive models based on the data in order to forecast future strategies. Respondent 5 said that AI had revolutionised the company's marketing strategy. The firm decided to invest in AI in terms of customer service since customer service was the top priority and the strategies were developed to deliver the greatest customer service, and they noticed a substantial increase in customer service. It aided in the enhancement of responsiveness and efficiency. Furthermore, the corporation is making AI investment decisions in the future. Prior to the deployment of AI, Ali Hassan claims that the market strategy was centred on long-term client value and redirecting marketing efforts on new modes of communication. Following the adoption of AI, the firm began focusing on social media reach, personalisation, improved data collection, SEO, payment procedures, and sales optimization, with all initiatives geared toward these goals.

CONCLUSIONS AND RECOMMENDATIONS

The purpose of the article was to investigate the influence of AI on marketing from the perspective of Indian marketing experts. Different measures were taken in order to achieve the research's goal and answer the research questions. A complete literature study was first emphasised, which gave a detailed grasp of AI and its use in marketing by including the perspectives of many scholars. Second, the researcher employed a qualitative study approach that included semi structured interviews with 15 marketing professionals from ten different Indian organisations. The research's main findings revealed that competitive pressure, media attention, digital maturity, and customers are the important influencing variables in incorporating AI in marketing. Different replies were received from the respondents on the results relating to the benefits of incorporating AI in marketing. According to marketing professionals, the major benefits include increased efficiency, time savings in marketing functions, improved conversion rates, a better understanding of customer information, more feasible marketing decisions, increased ROI, insights, improved service, and customer satisfaction. Improved data analysis and efficient marketing operations are among the other advantages. In response to a question on the most difficult aspect of AI integration in marketing, respondents said that technical compatibility is the most difficult aspect. Respondents also felt that having data in place is critical since it is the most significant aspect of AI; consequently, data is also the largest hurdle, according to them. According to the respondents, data is the most important ethical factor to consider when dealing with clients.

When asked about the use of AI in the company's marketing, respondents responded that AI has improved the marketing function's effectiveness and that it is now employed in virtually all of the main marketing functions. According to them, AI aids in the development of sales and marketing strategies that result in significant gains in corporate performance. The studies above emphasise the relevance of AI in corporate marketing. AI has changed the marketing environment and is assisting in the modernization of outmoded marketing strategies. Organizations will have a significant difficulty in adapting to the shifting environment of marketing. With the rise of innovation, businesses must plan for the future and train their personnel on a continuous basis. The research has made a good contribution to the existing literature by filling in the gaps in the literature by focusing on the influence of AI in marketing from the perspective of a marketing professional.

This underscored the relevance of AI in marketing as well as the numerous advantages that come with its incorporation. Furthermore, the primary hurdles, ethical considerations, and applications presented firms with a roadmap for implementing AI in marketing. Firms should pay attention to the aspects and problems of incorporating AI into marketing.

REFERENCES

Agrawal, D. K. (2022). An Empirical Study On Socioeconomic Factors Affecting Producer's Participation In Commodity Markets In India. Journal of Positive School Psychology, 2896-2906.

- Ahmed, K. (2015). Google's Demis Hassabis misuse of artificial intelligence 'could do harm'.
- Basha, M., Singh, A. P., Rafi, M., Rani, M. I., & Sharma, N. M. (2020). Cointegration and Causal relationship between Pharmaceutical sector and Nifty-An empirical Study. PalArch's Journal of Archaeology of Egypt/Egyptology, 17(6), 8835-8842.
- Basha, S. M., & Kethan, M. (2022). Covid-19 Pandemic and the Digital Revolution in Academia and Higher Education: an Empirical Study. Eduvest-Journal of Universal Studies, 2(8), 1-648.
- Basha, S. M., & Ramaratnam, M. S. (2017). Construction of an Optimal Portfolio Using Sharpe's Single Index Model: A Study on Nifty Midcap 150 Scrips. Indian Journal of Research in Capital Markets, 4(4), 25-41.
- Basha, S. M., Kethan, M., & Aisha, M. A. (2021). A Study on Digital Marketing Tools amongst the Marketing Professionals in Bangalore City. JAC: A Journal of Composition Theory, 14(9), 17-23.
- Bughin, J., et al. (2017). Artificial Intelligence: The Next Digital Frontier. McKinsey Global Institute.
- Chatterjee, S. et al. (2019). Are CRM systems ready for AI integration? A conceptual framework of organizational readiness for effective AI-CRM integration, 32, 144–157.
- Columbus, L. (2019). 10 charts that will change your perspective of AI in marketing.
- Davenport, T. et al. (2019). How Artificial Intelligence will change the future of marketing. Journal of Academy of marketing Science, 48, 24-42.
- Dimitrieska S. et al. (2018). THE POWER OF PRIVATE BRANDS TY JOURNAL CBU International Conference Proceedings.
- Dr. Isac Gunday , Dr. M. Kethan , Mr. Mahabub Basha S. (2023). A STUDY ON CONSUMER PERCEPTION TOWARDS FAST FOOD RETAIL OUTLETS WITH REFERENCE TO BENGALURU KARNATAKA. Journal of Pharmaceutical Negative Results, 418–424. https://doi.org/10.47750/pnr.2023.14.03.52
- Dr. Karthik Reddy , Mrs. Lakshmi. S N , Dr. S. Thilaga , Mr. Mahabub Basha. (2023). CONSTRUCTION OF AN OPTIMAL PORTFOLIO USING THE SINGLE INDEX MODEL: AN EMPIRICAL STUDY OF PRE AND POST COVID 19. Journal of Pharmaceutical Negative Results, 406–417. DOI:10.47750/pnr.2023.14.03.51

- Dr Santhosh Kumar, V., & Basha, S. M. (2022). A study of Emotional Intelligence and Quality of Life among Doctors in PandemicCovid 19. International Journal of Early Childhood, 14(02), 2080-2090.
- Halal, E. (2003). Artificial intelligence is almost here. Insights
- JagadeeshBabu, M. K., SaurabhSrivastava, S. M., & AditiPriya Singh, M. B. S. (2020). Influence of social media marketing on buying behavior of millennial towards smart phones in bangalore city. PalArch's Journal of Archaeology of Egypt/Egyptology, 17(9), 4474-4485.
- Jaggaiah, T. (2015). Returns of mango orchard and economic feasibility test of mango orchard in Chittoor District of Andhra Perdesh. *Ind. J. Appl. Res*, *5*, 598-600.
- Jaggaiah, T. (2021). IMPACT OF STRESS MANAGEMENT AMONG ACADEMICIANS WITH SPECIAL REFERENCE TO BANGALORE. Journal of Contemporary Issues in Business and Government Vol., 27(01).
- Jaggaiah, T., & Balaji, T. (2021). A Study On Stress And Its Management In Information Technology Industry In India. *Ilkogretim Online*, 20(1), 5785-5798.
- Jain, P. & Aggarwal, K. (2020). Transforming Marketing with Artificial Intelligence.
- Kethan M, & Mahabub Basha S. (2023). Impact of Indian Cinema on Youths Lifestyle and Behavior Patterns. East Asian Journal of Multidisciplinary Research, 2(1), 27–42. https://doi.org/10.55927/eajmr.v2i1.1670
- Kethan, M. (2022). Impact of Task Performance on Job Satisfaction of Information Technology Employees in Bengaluru City.
- Kethan, M., & Basha, M. (2022). Relationship of Ethical Sales Behaviour with Customer Loyalty, Trust and Commitment: A Study with Special Reference to Retail Store in Mysore City. East Asian Journal of Multidisciplinary Research, 1(7), 1365-1376.
- Kethan, M., Khizerulla, M., Sekhar, S. C., & Basha, M. (2022). A study on issues and challenges on production of handloom sector with special reference to rayalaseema and costal region of Andhra Pradesh. IJAR, 8(6), 89-95.
- Khokhar, M. P. (2019). Evolution Of Artificial Intelligence In Marketing, Comparison With

- Krishnamoorthy, D. N., & Mahabub Basha, S. (2022). An empirical study on construction portfolio with reference to BSE. Int J Finance Manage Econ, 5(1), 110-114.
- Kumarai, G. S., Bajaj, P. K., Rana, S. S., Basha, M., & Karumuri, V. (2022). An empirical study on customer satisfaction towards organized Retail outlets in Bengaluru city, Karnataka. Academy of Marketing Studies Journal, 26(5).
- Lopez, M. & Casillas, J. (2013). Artificial intelligence-based systems applied in industrial marketing: An historical overview, current and future insights, Industrial Marketing Management, 42(4).
- Masnikosa, V. P. (1998). The fundamental problem of an artificial intelligence realisation, Kybernetes, 27(1).
- McCarthy, J. 2007. What is Artificial Intelligence?
- Metaxiotis, K.et al. (2003), Decision support through knowledge management: The Role of Artificial Intelligence, Information Management and Computer Security, 11(5).
- Mohammed, B. Z., Kumar, P. M., Thilaga, S., & Basha, M. (2022). An Empirical Study On Customer Experience And Customer Engagement Towards Electric Bikes With Reference To Bangalore City. Journal of Positive School Psychology, 4591-4597.
- Raynor, W. J. (2000). The international dictionary of artificial intelligence. Reference Reviews, 14 (6).
- Sanjeev, V. et al. (2021). Artificial intelligence in marketing: Systematic review and future research direction, International Journal of Information Management Data
- Shahid, Z. & Li, G. (2019). Impact of Artificial Intelligence in Marketing: A Perspective of Marketing Professionals of Pakistan, Global Journal of Management and Business Research: E Marketing, 19 (2).
- Shaik, M. B., Kethan, M., & Jaggaiah, T. (2022). Financial Literacy and Investment Behaviour of IT Professional With Reference To Bangalore City. Ilomata International Journal of Management, 3(3), 353-362.
- Shaik, M. B., Kethan, M., Jaggaiah, T., & Khizerulla, M. (2022). Financial Literacy and Investment Behaviour of IT Professional in India. East Asian Journal of Multidisciplinary Research, 1(5), 777-788.

- Shaik, M. B., Kethan, M., Rani, I., Mahesh, U., Harsha, C. S., Navya, M. K., & Sravani, D. (2022). Which determinants matter for capital structure? an empirical study on NBFC'S in India. International Journal of Entrepreneurship, 26, 1-9.
- Stefanuk, V. L. and Zhozhikashvili, A. V. (2002). Productions and rules in artificial intelligence, Kybernetes: The International Journal of Systems & Cybernetics, 31(6).
- Sterne, J. (2017). Artificial Intelligence for Marketing: Practical Applications. John Wiley & Sons, Inc.
- Tay, D. P. H. and Ho, D. K. H. (1992). Artificial intelligence and the mass appraisal of residential apartments, Journal of Property Valuation and Investments, 10(2).
- Theodoridis, K. & Gkikas, C. (2019). How Artificial Intelligence Affects Digital Marketing
- Thiraviyam, T. et al. (2018). International Journal of Recent Research Aspects ISSN: 2349-7688, Special Issue: Conscientious Computing Technologies, 449-452.
- Wierenga, B. (2010). Marketing and artificial intelligence: Great opportunities, reluctant partners.
- Wierenga, B., & Bruggen, G. H. (2000). Marketing management support systems: Principles, tools, and implementation (Vol. 10). Springer Science & Business Media.
- Wongpinunwatana, N. et al. (2000). An experimental investigation of the effects of Artificial Intelligence systems on the training of novice auditors.

 Managerial Auditing Journal, 15 (6).