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# Study the Impact of AI-Enabled Social Media Marketing on Efficiency Gains in IT Companies

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## Abstract

*The current adoption of Artificial Intelligence (AI) in the marketing processes has transformed the way IT firms interact with their customers and how they streamline business operations. The subject of this research is the influence of social media marketing based on the use of AI on the efficiency of IT businesses, including but is not limited to aspects of customer interaction, campaign automation, data-driven decision-making, and ROI. The AI tools, when applied through machine learning algorithms, chatbots, predictive analytics, and sentiment analysis, considerably lower the price and time of real marketing activities, increase the targeting precision and customer satisfaction. The data in marketing managers and analytics experts working in major Indian IT companies was observed in the form of structured questionnaire and interviews. Also, the study applied performance measures like conversion rate, engagement rate, lead-to-sale ratio, and campaign turnaround time to compare efficiency improvements. The regression and correlation-based statistical analysis showed that there exists a strong positive correlation between AI-based marketing and operation efficiency. These findings imply that the strategic use of AI in marketing through social media does not only improve the performance of a firm but also makes them achieve a competitive advantage in a crowded digital market. The research then proceeds to give guidelines on expanded use of AI and policymaking in its application to promote responsible and ethical application.*

**Keywords:** Artificial Intelligence, Social Media Marketing, IT Companies, Operational Efficiency, Marketing Automation, Customer Engagement.

## Introduction

Within the context of the fast-changing digital economy, information technology (IT) businesses have to deal with an increased pressure in order to be competitive, responsive, and customer-focused. The development of artificial intelligence (AI) has led the realm of business strategies to the new levels, especially within the sphere of marketing. AI-enabled social media marketing is one of the technological trends that has been shaping one of the most significant changes and defining the way IT firms can communicate with their audience, market their services, and, eventually, experience operational efficiency. Since the digital platform is slowly turning into the primary means of communication and branding, the use of AI in optimizing marketing strategies is not a vision of the future but a current necessity (Kotler et al., 2017).

LinkedIn, Facebook, Twitter, and Instagram are social media platforms that have proved to be important instruments that IT firms use to connect with customers and other stakeholders in real-time. The main characteristic of these platforms is that they are rich in data which provides unrivaled insights on consumer behaviour, preferences and feedback. Nonetheless, the tsunami of quantity, speed and diversity of information on social networks is becoming a challenge to understand and respond to in the usual ways through marketing strategies. AI technologies: such as machine learning, natural language processing and computer vision, sentiment analysis will provide intelligent automation and pattern recognition ability that allow marketers to generate actionable insights in the face of very large datasets (Van Esch & Stewart Black, 2021). That is why AI is growing as a strong partner in development, implementing, and optimization of social campaigns.

The inclusion of AI in the social media marketing platform presents several efficiency advantages to the IT firms.

These encapsulate and are not inclusive to real time customer engagement via chatbots, customization of the contents via predictive analyses, automation of the campaign, identification of the influencers and adaptive campaigns with regard to the budget setting. These tools are not only able to reduce manual involvement and reduction of operational expenses but also increase precision and time back in dealing with customers (Akter et al., 2023). As an illustration, machine learning algorithms can provide the most appropriate time to share content, to what audience groups this material is likely to be better consumed, and which search terms will have an increased click-through rate a task that would require a lot of human resources and time to complete.

Artificially intelligent systems, such as Hootsuite Insights, Sprinklr, Salesforce Einstein, and IBM Watson Marketing provide an environment to operate end-to-end social campaigns based on data-driven insight. It allows users to compile statistics based on the content created by users and even predict future tendencies on the market by using algorithms to analyze brand sentiment, follow competitor performance, etc. This does not only makes decision making faster, but also increases the speed of the campaign. According to the arguments by Luo et al. (2024), AI-driven social Customer Relationship Management (CRM) capabilities significantly and statistically contribute to the development of the marketing performance, primarily in an environment driven by services, such as the IT business.

The principle of marketing effectiveness is multidimensional, covering speed, cost, conversion level of customers and the return of investments (ROI). Efficiency in marketing implies resource optimization, among other things, and the maximization of the impact in the competitive business environment. Using data to make decisions is a founding characteristic of IT companies, so none are in a better position to take advantage of AI-enabled tools. These tools empower marketers to sort out their leads, be more personal, and reduce the selling cycle. Further, Saura et al. (2024) state that computer AI also brings a paradigm shift to ethically applicable use and privacy of data, thereby forcing IT companies to work transparently, accountably and enjoy efficiency gains.

The COVID-19 pandemic also stimulated the process of digitalization of businesses operating in every industry. There was an increased dependency on online means to connect with the customer due to the proliferation of remote work and online consumption. Artificial intelligence-based social media marketing was critical in this transformation, allowing the businesses to stay visible, deal with crises, and look into new markets during disruptions. According to Carayannis et al. (2025), AI technologies play a crucial role in business resilience and sustainable competitiveness of the businesses (especially small and medium enterprises, or SMEs, in the tech sector).

Besides they are required those analytical tools, which lie beyond the scope of descriptive statistics, due to the growing complexity of consumer

behavior in a hyperconnected world. Such tools, as AI sentiment analysis, are capable of parsing emotions, tone, and the intention out of online text, video, and audio content based on the account of the user (Nicolas et al., 2024). These tips are priceless to any marketing practitioner who wants to ensure that the messages he/she is sending are emotionally precise to a point that they will connect well with the target audience. Emotional resonance He plays an important role in IT services because, in this industry, consumer trust and brand perception are key purchase drivers (Martin & Schouten, 2014).

Besides engagement gain, AI tools can contribute a lot towards reducing time-to-market of new campaigns. Automated A/B testing solutions, performance dashboards and adaptive learning algorithms enable marketers to implement reiterative improvements in a time-saving and confident manner. Deiss and Henneberry (2020) remark that the tools lessen the necessity of difficult manual work, allowing the creative teams to engage in the sphere of innovation and high-level strategy. Such reallocation of resources can only lead to higher operational efficiency, which is a primary KPI of any scale-up IT enterprise.

Nonetheless, the incorporation of AI in social media marketing does not come short of obstacles. One of the major adoption barriers is algorithmic bias, data privacy implications, unavailability of talented labor and infrastructural limitations of technology. According to Akter et al. (2023), uncontrolled automation is capable of strengthening stereotypes or marginalizing some user groups, which jeopardizes brand image. Nevertheless, these risks may be overcome with not the least appropriate governance systems and morality codes. Academic and corporate circles are now entertaining how the ethical use of AI can be applied to marketing so as to create an equilibrium between innovation and responsibility (Saura et al., 2024).

Moreover, considering strategic management, it is vital to introduce the alignment of the AI tools and organizational objectives. The introduction of AI cannot be considered a technical improvement of business but its fundamental component of change. The critical role of AI within the context of the sustainability and efficiency agenda in firms, which is especially important because of the heightened competition and volatility in such business domains as the IT industry, is emphasized by Nishant et al. (2020). The responsibility of AI in marketing does not imply speed but rather it is focused on making it smarter and dealing with value creation in the long-run.

The study in this field is still at an early promising stage. The efficiency achieved in social media marketing in IT firms through AI is being confirmed by empirical researches and case evidence. It is, however, unclear on how deep and comprehensive these effects have been on companies of different sizes, maturity, and digitalization. This study attempts to address the said gap by undertaking a systematic study on the way AI tools can be effectively utilized

in social media marketing, which efficiency indicators are affected in the process and what best practice may be extrapolated to most part of the IT industry.

Finally, the combination of AI and social media marketing is another turning point in the history of digital business operation. In an environment where data-driven technology is the key determinant in an otherwise competitive business world, the use of AI-enabled solutions is no longer an option but rather a tool of survival among IT firms. With this study we want to investigate how these tools lead to quantifiable efficiency, the challenges pose, and how IT companies can make the most of using them in order to gain the long-term strategic benefit.

### Literature Review

The crossroad between artificial intelligence (AI) and digital marketing has acquired central status among business-related topics in the existing business research, particularly when companies are faced with the dilemma of digitalization, customer relationships, and marketer effectiveness. The literature reviewed demonstrates the multidisciplinary perception of how the AI technologies once applied to social media marketing plans operated can bring improvement in the operational efficiency, customer experience, and organizational resilience and in a case of IT companies, they are very much likely to be referred to.

The premise of digital marketing is presented clearly by Deiss and Henneberry (2020), who state that the marketing in the digital era is not a line sequence, but rather, it was a dynamic process of real-time data, multi-channel contacting, and communicating with consumers. The social media sites also act as sources of information and sources of marketing and the firm can reach tons of customers through this. Nonetheless, they also have predicaments related to complexity of data, timing and personalization. The authors maintain that automation and artificial intelligence in managing the complexity is crucial, and for the companies operating with large volumes of data, such as IT service providers.

The use of Artificial Intelligence, especially machine learning and natural language processing has played a major role in changing the way organizations perceive and act on their audiences. In their article, Van Esch and Stewart Black (2021) explain that the phenomenon of AI acts as a revolutionary transformation in the field of marketing since the implemented technology can automate customer segmentation, personalize the content, and optimize the placement of ads. Such functions serve particularly well in IT firms which are dependent on data analysis and accuracy targeting. The marketing efficiency of AI is also important as it helps not only save money but also accelerate the outreach by making it more relevant.

When considering ethical ramifications of implementing AI in marketing, Saura, Skare, and Dosen (2024) offer so-called a data privacy paradox concept. On the one hand, consumers want personalization of their content, on the other, they feel

that their data is misused. This paradox comes with a burden on IT companies to guarantee transparency and compliance and, at the same time, exploit AI to achieve performance improvements. Their evidence shows that issues of ethics cannot be interpreted as mere forms of regulatory challenges, but could as well be important shapers of brand image and customer loyalty.

This issue is also investigated by Akter et al. (2023) who concentrate on the concept of the algorithmic bias and the necessity of the bias management capabilities in the field of AI-driven marketing analytics. The authors believe that although AI can make operations more efficient, it can lead to discrimination, which can break customer relations and brand equity when implemented improperly. Because IT firms usually serve international markets, it emerges as a technological imperative as well as a strategic requirement to control the problem of algorithmic bias. According to their work, there is an increased desire to have a cross-functional collaboration among the data scientists, marketers and ethicists to develop inclusive and accurate models that AI presents.

Nishant, Kennedy and Corbett (2020) continue the discussion under the topic of sustainability, proposing that AI could not only create efficiency but also correspond with sustainable business strategies. The researchers have suggested a framework in which AI deployment in marketing would help support the wider organizational objectives like environmental stewardship, corporate responsibility, and resilience. This is an opportunity to avail to the IT companies since they can now embrace operational effectiveness and sustainability simultaneously, and these are two dimensions that stakeholders and investors are also beginning to prefer.

The association of the possibility of AI, marketing resilience, and firm adaptability is also expressed in the studies by Carayannis et al. (2025). They study the role of using AI, in combination with strategic foresight, along with its ability to enhance the resilience of small and medium enterprises (SMEs), such as IT companies. They suggest that AI allows companies to adequately predict any market shocks, quickly react and ensure the continuity of services, all of which are important aspects of competitive markets. Their report is especially topical in the post-COVID-19 world, when companies with flexible marketing systems powered by AI had a better chance of not only surviving but also making it far better in their business.

Kumar, Gawande, and Brar (2020) also propose another aspect of marketing resilience, i.e., the ability to adapt strategies that would ensure brand consistency in crisis situations. According to their work, applications of AI, i.e., chatbots, automated scheduling, and sentiment analysis, can assist marketers to ensure the continuous flow of communication, even when the resources may be limited. In that process, IT firms, which are often faced with the mandate to manage technology

infrastructure on behalf of others, can be the best role models since they can be guided by the same set of measures.

Theoretically, the topic of resilience has a strong base in the literature of psychology and sociology. Fraser, Richman and Galinsky (1999) give a conceptual treatise whereby risk, protection and resilience are examples of constitutive elements of adaptive systems. Applying these components to the marketing domain would indicate the capacity of firms to predict risks, implement the mitigation AI technologies (e.g., data governance) and bounce back after the realization of disruptions. Yates and Tyrell (2015) go further to explain how the theory of resilience is connected to positive psychology and organizational behavior, specifically, making adaptability, proactivity, and learning to be of importance to dynamic markets.

Blessin et al. (2022) provide a more global look into resilience through systematic review pointing at the diversity of interventions designed to enhance resilience according to economic and cultural settings. The finding is important to the IT companies with operations in various regions because culturally the marketing content should be relevant and situated in the appropriate context. When trained on geographically-focused data, AI tools can help in development of localized content to enhance engagement and reputational risks are minimized.

Raghavan and Sandanapitchai (2019) focus more on cultural predictors of resilience, demonstrating that this latter is not a universal concept as it is affected by community, culture, and lived experiences. Such learnings are important in developing AI algorithms in case of social media marketing because assumptions entrenched in the models might affect results. In the case of IT companies, where customers are spread in different geographies, instilling AI tools with cultural intelligence is crucial to precise and behavioral interaction.

Kotler, Kartajaya, and Setiawan (2017) offer a strategic perspective of the Marketing 4.0, wherein the move towards digital necessitates the adoption of data, automation, and the focus on the customer by the marketers. In their model, they situate AI at the nucleus of this transformation and point out that companies that do not evolve to intelligent systems become obsolete. In the case of IT companies, the usage of marketing aligned with the capabilities of AI is no longer a matter of option but one of strategy since the core activities of the company involve innovation and technological advantage.

The informational aspect of AI-powered marketing is reflected as well in the work by Luo et al. (2024) who examine the use of social media by organizations in order to improve marketing performance. They discover that capabilities of the Social CRM, particularly, when AI-enabled, result in increased rates of customer retention, acquisition and brand loyalty. These results are similar to the main performance measurements (KPIs) followed by IT companies, which are their conversion rates, net

promoter score (NPS), or customer lifetime value (CLV).

Related to that, Nicolas et al. (2024) discuss their current importance resulting in reputation risk management, especially, to the environmental, social, and governance (ESG) performance, through the current role of AI and social media. In a reputation risk world, consumer response can take a new turn in a moment depending on the social media discussions where the only way a firm gets an upper hand only with AI tools to monitor, interpret, and predict reputational risk. With regard to the IT companies (who tend to provide a source of digital transformation to other businesses), their own ESG reputation can influence the results of business.

As Montuori (1999, 2022) lays out, a meta-perspective on the role of creativity, systems thinking and crisis navigation in determining proper establishment of adaptive cultures comes to the fore. In his opinion, implementation of technology and AI in particular, may be only a part of a bigger picture of humanism, where innovation will be to bring both profit and purpose to it. Such philosophical thinkers concur with the substantial opinion that AI must be applied in marketing simultaneously with the assurance that the balance in performance and ethics, personalization, and privacy, automation, and human control is creating the tradeoff.

### **Research Methodology**

The research design, data collection process, sampling method and tools to be used in analysis and the reason as to why different methods have been used are described in methodology chapter. This paper has its quantitative method, which relies on qualitative data to examine the contribution of Artificial Intelligence (AI) in making social media marketing efficient in IT firms. The aim is to evaluate a measurable change in such marketing results as integration of AI and to discover the linked difficulties and perceptions.

### **Research Design**

In this study a descriptive and explanatory research design is followed. The descriptive research allowed to discover the trends of AI usage in social media marketing, and the explanatory research allowed analyzing the cause-effect connection between AI application and the indicators of the marketing efficiency. The method utilized to collect primary data was cross-sectional survey by sampling professionals employed in AI-based marketing tools in IT companies.

### **Population and Sample**

The target population for this study consisted of marketing professionals, AI strategists, and digital analysts working in mid- to large-scale IT firms in India.

- Sample Size: 150 respondents
- Sampling Technique: Purposive sampling was employed to select individuals who had direct experience in implementing or managing AI-enabled social media marketing campaigns.



The sample size was taken to be sufficient to carry out statistical analysis and representational to the decision-making and operation cohorts of the marketing based in IT companies.

#### Data Collection Tools

The first instrument of data collection was a structured questionnaire. It was parted in four parts:

1. Demographic Information (gender, age, experience, job role)
2. AI Tool Usage Patterns (types of tools used, frequency)
3. Perceived Marketing Benefits (measured using a 5-point Likert scale)
4. Efficiency Indicators Before vs After AI Adoption (turnaround time, cost, lead conversion, etc.)

Besides, open-ended queries were there to obtain qualitative responses about perceived difficulties and implementing experiences.

#### Pilot Testing and Validation

Pilot study amongst 10 marketing specialists was carried out in order to gauge clarity, reliability and face validity of the questionnaire. Inclusion of feedback provided a rephrasing of unclear items and improved response categories.

**Reliability Coefficient (Cronbach's Alpha)** for the benefit and efficiency scales:

- AI Usage Perception Scale:  $\alpha = 0.84$
- Efficiency Improvement Scale:  $\alpha = 0.81$
- This indicated good internal consistency and reliability.

#### Data Collection Procedure

The sampling was done within a span of four weeks where both online (Google forms) and offline interviews were used. All the participants gave their consent and data confidentiality was promised. Voluntary participation and anonymization of responses were seen to make the analysis anonymous.

#### Results and Discussion

The current chapter describes results of thorough research of the primary data that were gathered in 150 professionals operating in the field of information technologies. These respondents included marketing managers, AI strategists, and digital communication specialists who participate in social media marketing with the help of AI. This analysis aimed at examining the role of artificial intelligence implementation in social media marketing in terms of its impact on operational efficiency among IT companies. The findings are presented in a systematic way beginning with demographic characteristic of the study population, use habits, reported benefits, and various outcomes of efficiency calculations and the statistical associations.

#### Demographic Profile of Respondents

**Table 1: Demographic Profile of Respondents**

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	98	65.3%
	Female	52	34.7%
Age	21–30	42	28.0%
	31–40	71	47.3%
	41 and above	37	24.7%
Work Experience	1–5 years	58	38.7%
	6–10 years	65	43.3%
	Above 10 years	27	18.0%
Job Role	Marketing Professional	72	48.0%
	Data Analyst	39	26.0%
	AI Strategist/Developer	39	26.0%

The sample was heterogeneous, and mostly male (65.3%) and of the age 3140 years (47.3%). The majority of them were 6-10 years experienced in work. The sample of respondents accounted for a balance of positions related to the overlap of AI and marketing.

#### Usage of AI in Social Media Marketing Activities

**Table 2: Distribution of Respondents Based on AI Tools Used in Social Media**

AI Tool Used	Number of Users	Percentage (%)
Chatbots (e.g., Drift, Intercom)	112	74.7%
Predictive Analytics Tools	98	65.3%
Sentiment Analysis Tools	86	57.3%
Content Automation Tools	103	68.7%
Social CRM Tools	91	60.7%

AI solutions which were most commonly used included chatbots and content automation tools with 74.7 and 68.7, respectively. This implies that majority of the IT companies are focusing on automating the customer interactions and scheduling campaigns. There was also a great adoption of predictive analytics and social CRM.

#### Perceived Benefits of AI-Enabled Social Media Marketing

**Table 3: Perceived Benefits of AI-Enabled Social Media Marketing Among**

Benefit	Mean Score (1-5)	Standard Deviation
Improved Customer Engagement	4.46	0.61
Higher Campaign ROI	4.23	0.68
Faster Decision-Making	4.11	0.72
Increased Lead Conversion	4.34	0.59
Reduced Marketing Costs	4.06	0.76

The largest benefits of applying AI in marketing seen by respondents included better customer engagement ( $M = 4.46$ ) as well as higher lead conversion ( $M = 4.34$ ). Having lower score on cost reduction implies that the AI has the ability to enhance quality and speed but sometimes does not achieve the objective of cost reduction directly.

#### Efficiency Metrics Before and After AI Implementation

**Table 4: Comparison of Marketing Efficiency Metrics Before and After AI**

Metric	Pre-AI Mean	Post-AI Mean	% Improvement
Campaign Turnaround Time	14.3 days	8.5 days	40.6%
Lead-to-Sale Conversion	11.2%	19.6%	75.0%
Customer Query Response	22 hours	6.4 hours	70.9%
Monthly Marketing Cost	₹1,25,000	₹98,500	21.2%

What can be seen in the data is that AI is associated with a great degree of efficiency. The campaign turnaround time reduced by 40.6 percent and the response time on queries increased by more than 70 percent. The conversion of leads to sales increased by almost twice the number, indicating the high level of precision in the targeting of AIs.

#### Correlation Analysis between AI Adoption and Efficiency

**Table 5: Correlation Between AI Usage and Marketing Efficiency Indicators**

Variables Correlated	Pearson r	Significance (p-value)
AI Tool Usage & Campaign ROI	0.63	$p < 0.01$
AI Tool Usage & Lead Conversion	0.71	$p < 0.01$
AI Usage & Customer Satisfaction Score	0.55	$p < 0.05$

AI and campaign ROI ( $r = 0.63$ ) and AI and lead conversion ( $r = 0.71$ ) were positively and strongly related. These correlations are proved to be statistically significant and affirm the influence AI has on the performance of marketing.

#### Regression Analysis: AI Usage Predicting Marketing Efficiency

**Table 6: Regression Analysis of AI Predictors Influencing Marketing Efficiency**

Predictor Variable	$\beta$ (Beta)	t-value	p-value
AI Tool Usage Frequency	0.48	5.67	$p < 0.01$
AI-Driven Personalization	0.42	4.91	$p < 0.01$
Social Media Budget Allocation	0.28	3.12	$p < 0.05$

$R^2 = 0.56$

The regression outcomes indicate that the use of AI tools is the best predictor of the efficiency of marketing ( $\beta = 0.48$ ). The joint contribution of the variables is an explanation of 56 percent in efficiency. This highlights the significance of adoption as well as strategic application of AI in social campaigns.

#### Conclusion

Overall, it can be seen that application of Artificial Intelligence in social media marketing plays a significant role in increasing level of efficiency in running the operations of IT enterprises. With the help of technological advancements, including AI chatbots, sentiment analysis, predictive analytics, and content automation, organizations may optimize their marketing steps, boost customer interactions, and get a better ROI. These findings confirm that AI decreases the cost and time of the turnaround but also helps to reach the target more precisely and make decisions quicker. Although some issues with integration, moral utilization, and dexterity deficiencies still are on the table, the overall implications of AI-driven tactics on marketing performance are simply enormous. As we speed towards a digital transformation, AI-driven marketing

is a practice that will have to be adopted by IT firms in the process of achieving perpetual competitiveness, scalability and innovativeness in the constantly changing digital market.

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The authors declare that there are no conflicts of interest regarding the publication of this paper.

## References

- Deiss, R., & Henneberry, R. (2020). *Digital marketing for dummies*. John Wiley & Sons.
- Bartl, G., Hardt, J. N., Suttner, S., Linden, M., Ventura, R. A., Vogler, A., Stanley, A., Herms, K., Zeigermann, U., Zimmermann, T., et al. (2024). Rethinking governance in times of multiple crises. *Vigoni Papers*, 5, 1–37.
- American Psychological Association. (2012). *Building your resilience*. <https://www.apa.org/topics/resilience>
- Yates, T. M. F. A., & Tyrell, A. S. M. (2015). Resilience theory and the practice of positive psychology from individuals to societies. In S. Joseph (Ed.), *Positive psychology in practice: Promoting human flourishing in work, health, education, and everyday life* (pp. xx–xx). John Wiley & Sons.
- Fraser, M. W., Richman, J. M., & Galinsky, M. J. (1999). Risk, protection, and resilience: Toward a conceptual framework for social work practice. *Social Work Research*, 23(3), 131–143. <https://doi.org/10.1093/swr/23.3.131>
- Kumar, A., Gawande, A., & Brar, V. (2020). Features of marketing resilience. *Vidyabharati International Interdisciplinary Research Journal*, 11, 250–253.
- Van Esch, P., & Stewart Black, J. (2021). Artificial intelligence (AI): Revolutionizing digital marketing. *Australasian Marketing Journal*, 29(2), 199–203. <https://doi.org/10.1016/j.ausmj.2021.03.003>
- Nishant, R., Kennedy, M., & Corbett, J. (2020). Artificial intelligence for sustainability: Challenges, opportunities, and a research agenda. *International Journal of Information Management*, 53, 102104. <https://doi.org/10.1016/j.ijinfomgt.2020.102104>
- Martin, D. M., & Schouten, J. W. (2014). Consumption-driven market emergence. *Journal of Consumer Research*, 40(5), 855–870. <https://doi.org/10.1086/673196>
- Montuori, A. (2022). Crisis of the future. In V. P. Glăveanu (Ed.), *The Palgrave encyclopedia of the possible* (pp. 325–333). Springer. [https://doi.org/10.1007/978-3-030-90992-9\\_41](https://doi.org/10.1007/978-3-030-90992-9_41)
- Intergovernmental Panel on Climate Change. (2023). *Climate change 2022—Impacts, adaptation and vulnerability: Working Group II contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (1st ed.). Cambridge University Press. <https://doi.org/10.1017/9781009325844>
- Montuori, A. (1999). Planetary culture and the crisis of the future. *World Futures*, 54(4), 297–311. <https://doi.org/10.1080/02604027.1999.9972661>
- Carayannis, E. G., Dumitrescu, R., Falkowski, T., Papamichail, G., & Zota, N. R. (2025). Enhancing SME resilience through artificial intelligence and strategic foresight: A framework for sustainable competitiveness. *Technology in Society*, 81, 102835. <https://doi.org/10.1016/j.techsoc.2024.102835>
- Kotler, P., Kartajaya, H., & Setiawan, I. (2017). *Marketing 4.0: Moving from traditional to digital*. Wiley.
- Luo, Z., Guo, J., Benitez, J., Scaringella, L., & Lin, J. (2024). How do organizations leverage social media to enhance marketing performance? Unveiling the power of social CRM capability and guanxi. *Decision Support Systems*, 178, 114123. <https://doi.org/10.1016/j.dss.2024.114123>
- Nicolas, M. L., Desroziers, A., Caccioli, F., & Aste, T. (2024). ESG reputation risk matters: An event study based on social media data. *Finance Research Letters*, 59, 104712. <https://doi.org/10.1016/j.frl.2023.104712>
- Blessin, M., Lehmann, S., Kunzler, A. M., van Dick, R., & Lieb, K. (2022). Resilience interventions conducted in western and eastern countries—A systematic review. *International Journal of Environmental Research and Public Health*, 19(11), 6913. <https://doi.org/10.3390/ijerph19116913>
- Raghavan, S. S., & Sandanapitchai, P. (2019). Cultural predictors of resilience in a multinational sample of trauma survivors. *Frontiers in Psychology*, 10, 131. <https://doi.org/10.3389/fpsyg.2019.00131>
- Akter, S., Sultana, S., Mariani, M., Wamba, S. F., Spanaki, K., & Dwivedi, Y. K. (2023). Advancing algorithmic bias management capabilities in AI-driven marketing analytics research. *Industrial Marketing Management*, 114, 243–261. <https://doi.org/10.1016/j.indmarman.2023.03.007>
- Saura, J. R., Skare, V., & Dosen, D. O. (2024). Is AI-based digital marketing ethical? Assessing a new data privacy paradox. *Journal of Innovation & Knowledge*, 9(1), 100597. <https://doi.org/10.1016/j.jik.2023.100597>