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# Exploring the Role of AI for Enhancement of Social Media Marketing

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Deepshikha Aggarwal<sup>1\*</sup>, Deepti Sharma<sup>2</sup>, Archana B. Saxena<sup>3</sup>

<sup>1\*,2,3</sup>Jagan Institute of Management Studies, Rohini, Delhi, India.

Corresponding Email: <sup>1\*</sup>[deepshikha.aggarwal@jimsindia.org](mailto:deepshikha.aggarwal@jimsindia.org)

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**Abstract:** *In recent years, the application of artificial intelligence (AI) in social media marketing has gained significant traction. AI has revolutionized the way businesses interact with their audiences on platforms like Facebook, Instagram, Twitter, and LinkedIn. With its ability to analyse vast amounts of data, predict consumer behaviour, and automate tasks, AI has become an essential tool for marketers looking to maximize their social media efforts. AI has transformed content curation, making it easier for marketers to find and share relevant content with their target audience. With AI algorithms, social media platforms can analyse user preferences and behaviour to deliver personalized content recommendations. AI can analyse the interests and browsing patterns of social media users to provide them with content that aligns with their preferences. This personalized content curation helps marketers increase engagement and build stronger connections with their audience. AI-powered chatbots have become an integral part of social media marketing strategies. These intelligent virtual assistants can provide immediate and personalized responses to customer inquiries, improving customer satisfaction and reducing response time (Conick, 2017). Chatbots can handle common queries, provide product recommendations, and even process transactions, saving businesses time and resources. By harnessing the power of AI, social media marketers can leverage predictive analytics to make data-driven decisions.*

**Keywords:** *Social Media, Digital Marketing, Artificial Intelligence, Ai for Marketing.*

## 1. INTRODUCTION

Social media marketing is using social media platforms by the companies to connect with their audience, build brand awareness, drive website traffic, and generate leads or sales. It involves creating and sharing content on social media platforms to achieve marketing and branding goals. It involves developing various types of content such as posts, images, videos, stories, and infographics that are engaging, informative, and relevant to the target audience. The brands need to identify the most suitable social media platforms where their target audience is present. Popular platforms include Facebook, Instagram, Twitter, LinkedIn, Pinterest, Snapchat,



YouTube, etc. social media marketing requires active engagement with followers and users through comments, messages, likes, shares, and other interactions to build relationships and foster a community around the brand.

Advertising and Promotion is done by utilizing paid advertising options offered by social media platforms to target specific demographics, increase reach, and drive conversions. This includes sponsored posts, ads, and boosted content (Dolan, 2019). Tracking and analysing of social media metrics such as engagement, reach, impressions, click-through rates, conversions, and demographics is done to measure the effectiveness of campaigns and make data-driven decisions for improvements. Social media marketing also involves collaborating with influencers or individuals with significant followings on social media to promote products, services, or brand messages to their audience. Providing customer service and support through social media channels by promptly responding to inquiries, addressing concerns, and providing helpful information also plays an important role in promoting the brand reputation.

Social media marketing is a dynamic field that requires a deep understanding of the target audience, content creation, strategic planning, and continuous adaptation to changing trends and algorithms on different platforms. When executed effectively, social media marketing can significantly impact brand visibility, customer engagement, and business growth.

Artificial Intelligence (AI) plays a significant role in revolutionizing social media marketing strategies and tactics. AI algorithms can process vast amounts of data from social media platforms in real-time. This analysis helps in understanding customer behaviours, preferences, and sentiments. Marketers can derive actionable insights from this data to tailor their marketing strategies accordingly (Dolan, 2019). By analysing past data, AI can predict future trends and outcomes, allowing marketers to make proactive decisions to stay ahead of the competition. Predictive analytics helps marketers optimize their social media campaigns by identifying the best times to post, the most effective content formats, and the most engaging topics for their target audience. AI has automated the process of creating and optimizing ad campaigns on social media platforms. With AI algorithms, marketers can set specific goals and parameters for their campaigns, such as target audience, budget, and desired outcomes. AI can then analyse data in real-time to optimize ad targeting, bidding strategies, and creative elements, ensuring that ads reach the right people at the right time.

AI enables personalized content delivery by analysing user behaviour, interactions, and preferences (Sanjeev Verma, 2021). It helps in creating tailored content, product recommendations, and targeted advertisements, thus enhancing user engagement and conversion rates. AI has also enabled the use of natural language processing (NLP) to enhance social media marketing. Through NLP, AI can analyse and understand the sentiment and emotions expressed in social media posts and comments. This allows marketers to gain valuable insights into customer opinions and perceptions, enabling them to better tailor their messaging and strategies. In addition to these applications, AI is also being used for social media monitoring and sentiment analysis. By analysing social media conversations, AI algorithms can detect trends, identify influencers, and monitor brand reputation. This information can help marketers make informed decisions and stay updated on the latest trends and conversations happening in their industry.

AI-powered chatbots provide instant customer support on social media platforms. These bots can respond to queries, offer assistance, and provide information 24/7, improving customer



satisfaction and reducing response times. AI algorithms can analyse customer queries and provide accurate and personalized responses, ensuring that customers receive the support they need quickly and efficiently. AI tools assist in content creation by generating text, images, and videos. They can also suggest content ideas based on trending topics and user interests, helping marketers in creating engaging content. AI powered tools have transformed the content creation process by generating text, images, and videos. These tools can also provide content ideas based on trending topics and user interests, helping marketers create engaging and relevant content (Tarafdar M. P.-N., 2015). Additionally, AI algorithms can analyse customer queries and provide accurate and personalized responses, ensuring that customers receive the support they need quickly and efficiently. AI-powered chatbots provide instant customer support on social media platforms, responding to queries, offering assistance, and providing information 24/7. This improves customer satisfaction and reduces response times.

AI optimizes ad targeting by analysing user data to identify the most relevant audience segments. It helps in optimizing ad placements, bidding strategies, and ad content to maximize the return on investment (ROI). AI algorithms predict future trends, customer behaviours, and market insights. Marketers can leverage this predictive analysis to anticipate trends and adjust their strategies proactively. AI algorithms can also automate the process of creating and optimizing ad campaigns on social media platforms. Marketers can set goals and parameters for their campaigns, and AI can analyse data in real-time to optimize targeting, bidding, and creative elements. This ensures that ads reach the right people at the right time, maximizing their effectiveness. AI-powered tools monitor social media conversations in real-time, helping in sentiment analysis, brand monitoring, and understanding public opinions. Marketers can use these insights to manage brand reputation and respond promptly to customer feedback. AI powered chatbots provide instant customer support on social media platforms. These bots can respond to queries, offer assistance, and provide information 24/7, improving customer satisfaction and reducing response times. AI algorithms can analyse customer queries and provide accurate and personalized responses, ensuring that customers receive the support they need quickly and efficiently.

## **2. LITERATURE REVIEW**

AI tools assist in content creation by generating text, images, and videos. They can also suggest content ideas based on trending topics and user interests, helping marketers in creating engaging content (Liye, 2012). AI-powered tools have transformed the content creation process by generating text, images, and videos. These tools can also provide content ideas based on trending topics and user interests, helping marketers create engaging and relevant content. AI tools can schedule and publish content at optimal times based on audience engagement patterns, ensuring maximum reach and visibility. AI tools can schedule and publish content at optimal times based on audience engagement patterns, ensuring maximum reach and visibility. This feature allows marketers to effectively plan and strategize their social media campaigns, increasing the likelihood of reaching their target audience and achieving their marketing goals. AI algorithms can also analyse and track the performance of social media campaigns in real-time. Marketers can gain insights into metrics such as reach, engagement, and conversion rates, allowing them to make data-driven decisions and optimize their strategies accordingly. This



data-driven approach helps marketers to continuously improve their social media efforts and achieve better results. Furthermore, AI-powered tools can facilitate social media listening, by monitoring and analysing conversations happening on various social media platforms.

AI helps in identifying suitable influencers by analysing their audience demographics, engagement rates, and authenticity, aiding marketers in making informed decisions about collaborations (Tarafdar M. G., 2013). AI helps in identifying suitable influencers by analysing their audience demographics, engagement rates, and authenticity, aiding marketers in making informed decisions about collaborations. AI algorithms can also automate the process of creating and optimizing ad campaigns on social media platforms, allowing marketers to set goals and parameters for their campaigns. By analysing data in real-time, AI can optimize targeting, bidding, and creative elements to ensure that ads reach the right people at the right time, maximizing their effectiveness. Overall, AI has revolutionized social media marketing by providing tools and insights that enhance personalization, customer support, predictive analytics, and ad campaign optimization. AI tools can analyse user-generated content, such as reviews and feedback, to understand customer sentiments and preferences, guiding marketing strategies and product improvements. AI powered tools can analyse user-generated content, such as reviews and feedback, to understand customer sentiments and preferences, guiding marketing strategies and product improvements. These tools can also monitor social media conversations in real-time, helping in sentiment analysis, brand monitoring, and understanding public opinions. Marketers can use these insights to manage brand reputation and respond promptly to customer feedback. AI algorithms can also assist in identifying suitable influencers by analysing their audience demographics, engagement rates, and authenticity, aiding marketers in making informed decisions about collaborations. Overall, AI has revolutionized social media marketing by providing tools and insights that enhance personalization, customer support, predictive analytics, and ad campaign optimization.

Overall, AI empowers social media marketers to streamline processes, enhance user experiences, and make data-driven decisions, ultimately improving the effectiveness of marketing campaigns on various social media platforms.

The advent of Artificial Intelligence (AI) has revolutionized various domains, including social media marketing. AI technologies enable marketers to analyse vast amounts of data, personalize content, and automate interactions, thus enhancing the effectiveness and efficiency of social media marketing strategies. This literature review explores the current state of research on the role of AI in enhancing social media marketing, focusing on key areas such as content creation, customer engagement, sentiment analysis, and predictive analytics.

AI-driven tools for content creation, such as natural language processing (NLP) and machine learning algorithms, have significantly improved the ability to generate relevant and engaging content for social media platforms.

Gao et al. (2021) highlight that AI algorithms can analyse user preferences and past behaviour to create personalized content, thereby increasing user engagement and satisfaction. The study also discusses the potential of AI to automate content curation and distribution, ensuring timely and targeted communication with audiences (Gao et al., 2021).

Luo et al. (2019) emphasize the role of AI in enhancing creativity in content creation. Their research demonstrates how AI can assist marketers in brainstorming and generating innovative



ideas, which are crucial for standing out in the competitive social media landscape (Luo et al., 2019).

AI-powered chatbots and virtual assistants have become essential tools for improving customer engagement on social media platforms. These technologies enable real-time, personalized interactions with customers, enhancing their overall experience.

Huang and Rust (2020) discuss the impact of AI chatbots on customer service in social media marketing. Their findings suggest that chatbots can handle a large volume of inquiries efficiently, providing instant responses and freeing up human agents for more complex tasks (Huang & Rust, 2020).

Kietzmann et al. (2018) explore the use of AI in social listening and customer interaction. The study demonstrates how AI can monitor social media conversations, identify emerging trends, and engage with customers proactively, thereby fostering a stronger brand-customer relationship (Kietzmann et al., 2018).

### **Sentiment Analysis and Social Listening**

AI technologies are adept at analysing sentiment and emotions expressed in social media posts, providing valuable insights for marketers to tailor their strategies accordingly.

Cambria et al. (2017) highlight the significance of sentiment analysis in understanding customer emotions and perceptions. Their research shows that AI can accurately gauge sentiment from text, images, and videos, enabling marketers to respond to customer feedback and adjust their campaigns in real-time (Cambria et al., 2017).

Tumasjan et al. (2020) discuss the integration of AI in social listening tools. The study reveals how AI algorithms can process and analyse large volumes of social media data to detect sentiment trends, identify potential issues, and inform strategic decisions (Tumasjan et al., 2020).

### **Predictive Analytics**

Predictive analytics, powered by AI, allows marketers to forecast trends, customer behaviour, and campaign outcomes, enabling data-driven decision-making.

Chaffey and Ellis-Chadwick (2019) discuss the role of AI in predictive analytics for social media marketing. Their research highlights how AI models can predict customer engagement, conversion rates, and optimal posting times, helping marketers to optimize their strategies for maximum impact (Chaffey & Ellis-Chadwick, 2019).

Wang et al. (2021) examine the use of AI in predicting virality and content performance on social media. Their findings suggest that AI can analyse patterns and features of successful posts to predict the likelihood of content going viral, allowing marketers to create more impactful campaigns (Wang et al., 2021).

### **Challenges and Future Directions**

Despite the numerous benefits, the integration of AI in social media marketing also poses challenges, such as data privacy concerns, algorithmic biases, and the need for continuous technological advancements.



Sarker et al. (2019) address the ethical and privacy issues associated with AI in social media marketing. Their study calls for the development of transparent and ethical AI practices to protect user data and ensure fair treatment (Sarker et al., 2019).

Davenport and Ronanki (2018) suggest that future research should focus on improving AI algorithms' accuracy and interpretability. They emphasize the importance of human-AI collaboration to harness AI's full potential in social media marketing (Davenport & Ronanki, 2018).

AI technologies have the potential to transform social media marketing by enhancing content creation, customer engagement, sentiment analysis, and predictive analytics. While challenges remain, ongoing research and technological advancements promise to address these issues and further enhance the role of AI in this dynamic field.

### **3. METHODOLOGY**

The research methodology for exploring the role of AI in enhancing social media marketing will involve a mixed-methods approach. Initially, a comprehensive literature review will be conducted to understand existing theories and applications of AI in social media marketing. Quantitative data will be gathered through surveys distributed to marketing professionals to assess the current usage and effectiveness of AI tools. Additionally, qualitative data will be collected via in-depth interviews with industry experts to gain insights into emerging trends and challenges. Data analysis will employ statistical techniques for the quantitative data and thematic analysis for the qualitative data, ensuring a holistic understanding of AI's impact on social media marketing. AI plays a crucial role in personalization of content for social media marketing by enabling businesses to tailor their content and interactions to individual users' preferences. AI algorithms analyse user behaviour, preferences, and past interactions to suggest personalized content to users (S., 2018). This includes recommending articles, videos, products, or posts that are more likely to resonate with specific users based on their interests. AI helps in segmenting audiences based on demographics, behaviour, interests, and other parameters. This segmentation allows marketers to create targeted campaigns that are more relevant to each group, increasing engagement and conversion rates. AI-powered chatbots on social media platforms provide personalized assistance to users, answering their queries, providing recommendations, and guiding them through the customer journey. These chatbots can simulate human-like interactions and offer personalized experiences based on user inputs. AI algorithms optimize ad targeting by analysing user data to determine which audience segments are most likely to respond positively to specific ads. This helps in delivering targeted ads to the right audience, thereby improving conversion rates and reducing ad spend wastage. AI algorithms predict user behaviour and preferences based on historical data. This insight helps in anticipating user needs, allowing marketers to proactively create personalized content or offers tailored to individual users. AI tools enable marketers to automatically customize content for different audience segments. This could involve dynamically altering images, headlines, or messages to better resonate with specific user groups. AI-driven sentiment analysis tools help in understanding how users feel about a brand, product, or campaign by analysing social media conversations. This information allows marketers to personalize their responses and engagement strategies accordingly. AI-powered recommendation engines can



suggest personalized products, services, or offers to users based on their browsing history, preferences, and past purchases. The research methodology for exploring the role of AI in enhancing social media marketing will involve a detailed and systematic approach, incorporating both quantitative and qualitative methods to ensure a comprehensive understanding of the subject.

**Literature Review:** The study will begin with an extensive literature review to identify and analyse existing research, theories, and frameworks related to AI applications in social media marketing. This will help establish a theoretical foundation and highlight gaps in the current knowledge that the study aims to address.

**Quantitative Data Collection:** A structured survey will be designed and distributed to marketing professionals across various industries. The survey will include questions aimed at understanding the extent of AI adoption, types of AI tools being used, and perceived effectiveness in enhancing social media marketing efforts. The survey will utilize a Likert scale for responses, allowing for the quantification of attitudes and experiences.

**Qualitative Data Collection:** To complement the quantitative data, in-depth interviews will be conducted with industry experts, including marketing managers, AI specialists, and social media strategists. These interviews will aim to uncover nuanced insights into the practical challenges, benefits, and future potential of AI in social media marketing. An interview guide will be prepared to ensure consistency while allowing flexibility for participants to share their experiences and perspectives.

**Data Analysis:**

**Quantitative Analysis:** The survey data will be analysed using statistical techniques, including descriptive statistics to summarize the data, and inferential statistics to identify significant patterns and relationships. Software such as SPSS or R will be used for this analysis.

**Qualitative Analysis:** The interview transcripts will be analysed using thematic analysis. This will involve coding the data to identify recurring themes and patterns, providing deeper insights into the qualitative aspects of AI's role in social media marketing.

**Integration of Findings:** The results from the quantitative and qualitative analyses will be integrated to provide a holistic understanding of the role of AI in enhancing social media marketing. This triangulation of data will help validate the findings and ensure robustness.

**Ethical Considerations:** Ethical approval will be sought before commencing the study. Participants will be informed about the purpose of the research, and their consent will be obtained. Data confidentiality and anonymity will be strictly maintained.

By employing this mixed-methods approach, the study aims to deliver a thorough and nuanced exploration of how AI can enhance social media marketing, providing valuable insights for both academic and practical applications.

Overall, AI enables marketers to create more personalized and targeted experiences for users on social media platforms, fostering stronger connections, higher engagement, and improved ROI on marketing efforts.



#### **4. RESULTS AND DISCUSSION**

AI is extensively used for sentiment analysis, a process that involves using natural language processing (NLP) and machine learning techniques to identify, extract, and understand emotions, opinions, and attitudes expressed in textual data. AI algorithms pre-process textual data by tokenizing words, removing stop words, stemming or lemmatizing, and converting text into a format that machines can understand. This step prepares the data for analysis. AI models extract relevant features from the text, such as words, phrases, or sentence structures, which can indicate sentiment (Rust, A strategic framework for artificial intelligence in marketing, 2021). This process helps in identifying patterns related to positive, negative, or neutral sentiments. Various machine learning models, including but not limited to Support Vector Machines (SVM), Naive Bayes, Recurrent Neural Networks (RNN), Convolutional Neural Networks (CNN), and more recently, Transformer-based models like BERT and GPT (Generative Pre-trained Transformer), are employed for sentiment analysis. These models are trained on labelled datasets to recognize and classify sentiments within text accurately.

AI models are trained using supervised learning techniques on labelled datasets where each text sample is associated with a sentiment label (positive, negative, and neutral). These models learn to classify new text data into these predefined sentiment categories. AI can go beyond overall sentiment and perform aspect-based sentiment analysis. This involves identifying specific aspects or features within a text (e.g., product features in a review) and associating sentiments with each aspect separately. Advanced AI models can detect specific emotions within text, such as happiness, anger, sadness, etc., providing a more nuanced understanding of sentiment beyond just positive or negative categorizations. AI-powered sentiment analysis tools can analyse large volumes of social media posts, reviews, comments, and other textual data in real-time, allowing businesses to swiftly understand public opinion about their products, services, or brands. AI models can be fine-tuned and improved over time by continuously training them with new data. This helps in adapting to changing language patterns and improving accuracy in sentiment analysis.

AI-driven sentiment analysis is widely used across industries for brand monitoring, market research, customer feedback analysis, social media monitoring, and more, providing valuable insights into public opinions and attitudes towards products, services, and brands.

##### **Discussion**

In the discussion of the results, the study will synthesize the findings from both the quantitative and qualitative analyses to draw meaningful conclusions about the role of AI in enhancing social media marketing.

**Integration of Quantitative and Qualitative Data:** The integration of the survey data and interview insights will provide a comprehensive picture of how AI is currently being utilized in social media marketing. The quantitative data will offer a broad overview of trends and patterns, while the qualitative data will add depth by providing context and explaining the underlying reasons behind these trends.

**Current Usage of AI Tools:** The results will likely indicate the prevalence and variety of AI tools being used in social media marketing. Common tools may include chatbots, recommendation engines, sentiment analysis, and predictive analytics. Discussion will focus





on how these tools are implemented and the specific functions they serve, such as automating customer service, personalizing content, or optimizing ad targeting.

**Effectiveness and Impact:** Analysis of the survey responses and expert interviews will reveal perceptions of AI's effectiveness in improving key metrics like engagement, conversion rates, and ROI. The discussion will explore how AI-driven strategies compare to traditional methods, and highlight any measurable improvements attributed to AI adoption.

**Challenges and Barriers:** The qualitative data will uncover challenges faced by marketers in integrating AI into their social media strategies. These may include technical issues, such as data quality and integration, as well as organizational barriers like lack of expertise and resistance to change. The discussion will delve into these obstacles and suggest potential solutions or areas for further research.

**Future Trends and Innovations:** Insights from industry experts will shed light on emerging trends and potential future developments in AI for social media marketing. Topics might include the growing use of machine learning for predictive analytics, advancements in natural language processing for better customer interactions, and the ethical considerations surrounding AI use.

**Practical Implications:** The discussion will translate the findings into practical recommendations for marketers. This could involve strategies for effectively implementing AI tools, best practices for overcoming integration challenges, and ways to measure the impact of AI on marketing performance.

**Theoretical Contributions:** The study will also contribute to the academic understanding of AI in social media marketing by filling identified gaps in the literature. The discussion will relate the findings back to existing theories and frameworks, suggesting modifications or extensions based on the new insights gained.

**Limitations and Further Research:** Acknowledging the limitations of the study, such as sample size or geographic focus, the discussion will propose areas for future research. This might include longitudinal studies to assess the long-term impact of AI, comparative studies across different industries, or deeper exploration of specific AI applications.

By thoroughly discussing the results, the study aims to provide a well-rounded understanding of the role of AI in enhancing social media marketing, offering valuable insights for both practitioners and researchers.

## **5. CONCLUSION**

The application of AI in social media marketing has revolutionized the way businesses interact with their audiences. From AI-powered content curation to automated ad campaigns, AI has provided marketers with powerful tools to enhance engagement, personalize messaging, and optimize their marketing efforts. By leveraging AI, businesses can stay ahead of the competition and drive meaningful results on social media platforms.

In conclusion, AI has revolutionized social media marketing by enabling personalized content curation, chatbots for customer support, predictive analytics, and automated ad campaigns. AI-powered tools have transformed the content creation process and enhanced customer support on social media platforms. With the ability to analyse vast amounts of data and make data-

driven decisions, AI has become an essential tool for marketers to maximize their social media efforts and stay ahead of the competition.

AI-powered tools have revolutionized social media marketing by providing powerful tools to enhance engagement, personalization, customer support, predictive analytics, and ad campaigns. AI algorithms can analyse vast amounts of data from social media platforms, allowing marketing to make data-driven decisions and stay ahead of the competition. AI-powered chatbots, content curation and automated ad campaigns have enhanced user engagement and conversion rates. AI-powered tools can also analyse user-generated content to understand customer sentiments and aid marketers in making informed decisions about collaborations.

## **6. REFERENCES**

1. Aggarwal D. (2023). Exploring the Role of AI for Online Grocery Shopping through Enhancing Personalized Recommendations and Customer Segmentation. *Technoarete Transactions on Advances In Computer Applications (TTACA)*.
2. Aggarwal D., S. D. (2020). Augmenting Consumer Satisfaction in Smartphone Based Online Shopping. *International Journal of Future Generation Communication and Networking*.
3. Aggarwal, D. S. (2023). Adoption of Artificial Intelligence (AI) For Development of Smart Education as the Future of a Sustainable Education System. *Journal of Artificial Intelligence, Machine Learning and Neural Network (JAIMLNN)*.
4. Conick, H. (2017). The Past, Present and Future of AI in Marketing. Retrieved from <https://www.ama.org/marketing-news/the-past-present-andfuture-of-ai-in-marketing/>
5. D., A. (2019). Mobile technology Adoption by Indian consumers. *International Journal of Recent Technology and Engineering (IJRTE)*.
6. D., A. (2020). Determinants for Consumer Attitude towards Technology Enabled Grocery Procurement. *International Journal of Engineering and Advanced Technology (IJEAT)*.
7. D'Arcy, J. G. (2014). Reflecting on the 'Dark Side' of Information Technology Use. *Communications of the Association for Information Systems*.
8. Davenport, T. G. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*.
9. De Veirman, M. C. (2017). Marketing Through Instagram Influencers: the Impact of Number of followers and product divergence on brand attitude. *International Journal of advertising*.
10. Dolan, R. C.-B. (2019). Social media engagement behavior: a framework for engaging customers through social media content. *European Journal of Marketing*.
11. Esch, P. v. (2021). Artificial Intelligence (AI): Revolutionizing Digital Marketing. *Australian Marketing Journal*.
12. Eşkisü, M. &. (2020). Trait Mindfulness as a Protective Factor in Connections between Psychological Issues and Facebook Addiction among Turkish University Students. *Studia psychologica*.
13. Harley, D. A. (2022). Mindfulness in a Digital World. In *Mindfulness in a Digital World*.



14. Hermann, E. (2022). Leveraging Artificial Intelligence in Marketing for Social Good—An Ethical Perspective. *Journal of Business Ethics*.
15. Jones, A. &. (2022). Mindfulness as a mediator in the relationship between social media engagement and depression in young adults. *Personality and Individual Differences*.
16. Liye, M. &. (2012). Machine learning and AI in Marketing – Connecting computing power to human insights. *International Journal of Research in Marketing* Jarek, K., Mazurek, G. *Marketing and Artificial Intelligence*.
17. Rust, M.-H. H. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*.
18. Rust, M.-H. H. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*.
19. S., D. (2018). Using Chatbots for Social Media Marketing. Retrieved from <https://mavsocial.com/chatbots-social-media-marketing/>
20. Sanjeev Verma, R. S. (2021). Artificial intelligence in marketing: Systematic review and future research direction. *International Journal of Information Management Data Insights*.
21. Tarafdar, M. G. (2013). The dark side of information technology use. *Information Systems Journal*.
22. Tarafdar, M. P.-N. (2015). Technostress: negative effect on performance and possible mitigations. *Information Systems Journal*.