

The Impact of Artificial Intelligence on Social Media

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Abstract: Artificial intelligence is having a dramatic impact on a variety of industries, including marketing and marketing communications. Its use enables the optimization of marketing activities and increases efficiency not only within large corporations, but also in small and micro businesses. On social media, AI plays a significant role in content creation, post scheduling, campaign analysis and other aspects. Implementing AI tools into social media management can be a key element for improving the performance and effectiveness of marketing communications. This paper examines the impact of AI on social media from the perspective of using AI in an SME environment. It analyses the current state of the art, the authors' perspectives and the results of empirical studies. It concludes with recommendations for the use of specific AI-based tools that businesses can use in social media management.

Keywords: Artificial intelligence, Marketing communication, SMEs, Social media

1. Introduction

The use of artificial intelligence and tools such as chat GPT has dramatically increased in popularity in many areas within marketing and marketing communications. According to Columbus (2020), the importance of AI in marketing is confirmed by the estimate that by 2023, 30% of customer service organisations will deliver proactive customer service using AI-enabled process orchestration and continuous intelligence.

The artificial intelligence (AI) market is expected to grow significantly over the next decade, according to a number of sources. According to Thormundsson (2023), the AI market is expected to grow from \$241.8 billion in 2023 to nearly \$740 billion in 2030, a compound annual growth rate of 17.3%.

According to Next Move Strategy Consulting (2023), its value of around \$208 billion in 2023 is expected to grow ninefold by 2030, reaching around \$1.85 trillion. In fact, the AI market covers a wide range of industries, including healthcare, education, finance, media and marketing. The rate of adoption and use of the technology is increasing worldwide. Chatbots, image-generating AI and mobile applications are among the major trends that will enhance AI in the coming years.

Artificial intelligence-based tools are a way to answer questions and solve problems in a variety of areas related to marketing communications and sales strategy. As the experience of AI users and companies grows, so do the demands and expectations of marketers to increase the effectiveness of marketing communications. Despite some doubts, concerns and a number of unanswered questions, it is clear that AI will have a fundamental impact on marketing, not only in large corporate environments, but also in small and micro businesses. In fact, it brings entirely new possibilities to the marketing of these businesses. It can personalise content, improve communication outcomes, provide feedback and innovate the use of social media itself.

Using a range of AI-based tools, marketers can create tailored content, measure results faster and more accurately, and provide feedback, and all in much less time than before. Information and data on the use of AI by small and micro businesses is still relatively scarce. However, it is clear from the above that AI is having a significant impact on how users interact with social media and how content is presented to them. AI increases personalisation and efficiency on social media, but also raises issues of privacy and transparency. Examples from the field show that AI is now being used by many brands to improve communication, personalise content, enhance customer service and manage reputation on social media.

This paper analyses the impact of artificial intelligence on social media. It examines the extent to which AI has influenced the use of social media for marketing communications and the trends it is bringing. The author presents the results of several empirical studies on the state of AI use within companies and their marketing communications on social media. At the same time, he provides an overview of the current state of the art in academic research.

2. Methodology

Offering an overview of the most important aspects shaping the use of artificial intelligence on social media, the following part of this study focuses on a relatively wide range of issues. To explore the current state of this problematic and the current state of using AI by enterprises, we refer to the existing body of knowledge and academic research, as well as a number of documents and reports to discuss the using of AI for marketing and

marketing communications. The reflection below employs the basic methods of meta-analysis, logical reasoning, and synthesis for presenting the individual findings, specific practical examples used to better explain the using of AI, as well as inductive and deductive reasoning and wider generalization.

3. Artificial Intelligence and Social Media

Social media is one of the main industries where marketers can use artificial intelligence to improve both performance and efficiency. According to Sadiku et al. (2021), artificial intelligence is a fundamental part of how today's social networks work. AI technologies offer the ability to increase productivity, identify new trends, reach a wider audience, find out what works for your niche, track performance and optimise campaigns in real time.

According to Kaput (2022), AI is a fundamental part of how today's social networks work. This is why AI-based tools are so widely used in marketing. Facebook uses a variety of AI tools to enhance each user's experience. Instagram uses artificial intelligence to identify and suggest visuals and images. Snapchat uses AI technology in the form of computer vision to monitor facial features and then apply filters to the face in real time. LinkedIn uses the power of AI to recommend connections, suggest job openings, provide specific posts in the feed and suggest people to follow. According to Sadiku et al (2021), the use of artificial intelligence in social media is growing at an unprecedented rate and is constantly transforming social media.

Many authors (e.g. Agnihotri, 2020; Chintalapati and Shivendra, 2022; Huang and Roland, 2021) point to the growing importance of artificial intelligence in marketing and social media. According to Sarmiento (2020), AI is used to continuously collect and analyse data on social media activity. According to Chui et al. (2018), AI will continue to influence social media networks as the technology develops and evolves. The combination of AI and social media is proving to be highly beneficial for businesses.

Anandvardhan (2021) emphasises that AI is playing a dominant role in defining how social media works today. Argan et al. (2022) point out that AI algorithms can predict consumer expectations and desires at scale, and can apply consumer behaviour theories and variables to improve advertiser-user interactions. According to Quadros (2020), the benefits that AI can bring to social media include (1) increased audience engagement, (2) greater efficiency, (3) smarter advertising, (4) refined content targeting, (5) reduced marketing costs with better return on investment, (6) AI-powered chatbots, (7) increased security, (8) cost reduction, (9) increased revenue, and (10) a competitive tool.

According to Resqi (2022), there has been an increase in the number of publications dealing with marketing communication in the period 2015 to 2022. The author emphasises that marketing communication studies over the last two years refer to marketing through social media.

In the literature we can find several examples of the influence of AI on social media. Pariser (2011) talks about personalised content. This includes recommending posts and advertisements that are relevant to each individual user. Examples are personalised views on platforms such as Facebook or YouTube. An example is Netflix's algorithm that suggests movies and shows based on the user's viewing history. Go et al. (2009) talk about sentiment analysis. AI analyses the sentiment of comments and posts on social media to measure public opinion. Gao et al. (2019) talk about bots and chatbots. Artificial intelligence can be used to create bots and chatbots that can interact with users on social media. Davidson et al. (2017) talk about content filtering. AI is used to filter content on social media to remove inappropriate or dangerous posts. Castillo et al. (2011) talk about trend prediction. AI analyses social media data to predict trends and viral events. Goodfellow et al (2016) talk about ad management. AI helps you better target your social media ads and maximise their effectiveness.

4. Use of Artificial Intelligence and Social Media by Enterprises

According to Sadiku et al (2021), social media has moved away from its traditional role as a platform for people to interact and connect. Today, smart companies are using social media for e-commerce, customer service, marketing, public relations and more. AI applications on social media platforms include text analysis, image analysis, spam detection, social insights, advertising, and data collection.

According to Kietzmann et al. (2018), AI's reasoning capabilities mean that it can uncover personality, tendencies, values, and needs from social media users' comments and posts. Sarmiento (2020) emphasises that companies are making better use of social media through AI. With the help of AI, data about your social media activity is continuously collected and analysed. Social media is currently being used to infer social behaviour and derive trends in combination with big data analytics tools.

According to Rodgers (2021), current developments and figures also point to the importance of AI in marketing and the high likelihood that this synergy will continue to grow in the future. More than 75% of consumers already use an AI-powered service or device. By 2021, AI marketing is expected to grow by 53%. By 2023, we expect global digital advertising to reach \$517.51 billion, with AI accounting for 80% of this sum.

Many companies are already using AI to personalise their websites, emails, social media posts, videos and other materials to better respond to customer demands (Khokhar, 2019). According to Budiyanto et al. (2022), social media is widely used not only for the purpose of conducting transactions, but also to provide users with the ability to showcase the goods or services they offer. Social media is also more focused on the process of brand presentation (branding) by marketers to potential consumers and more focused on the process of brand recognition, known as branding.

With the rise of AI over the past few decades, more and more companies are turning to machine learning programmes to streamline their operations and open up more opportunities for improvement within their businesses. According to a report by Tractica (2020), AI is recognised as the most influential technology for business, with an expected growth from \$10.1 billion in 2018 to \$126 billion by 2025.

Artificial intelligence is being used by many brands today to improve communications, personalise content, provide better customer service and manage social media reputation. Netflix uses AI to personalise content for its users. Algorithms track what movies and shows users have watched and recommend additional content based on that. This approach increases customer engagement and loyalty (How Netflix Uses AI to Predict Your Next Binge-Worthy Show, n.d.). Facebook uses AI to filter content and identify inappropriate posts and spam. This improves user experience and security on the platform (How Facebook Uses Artificial Intelligence, n.d.). Amazon uses AI to improve customer service through chatbots. These chatbots can answer customers' questions and help them select products (How Amazon Uses AI for Customer Service, n.d.). Coca-Cola uses chatbots on platforms such as Facebook Messenger to communicate with customers. They help answer questions, manage complaints and provide information about new products (Coca-Cola Turns to Facebook Messenger for Chatbot Customer Service, n.d.). Starbucks uses artificial intelligence to analyse customer feedback on social media. This provides important insights into what customers think about their products and services (How Starbucks Uses Artificial Intelligence for Customer Engagement, n.d.). Airbnb uses AI to rate hosts and guests. This helps to ensure credibility and safety on the platform (How Airbnb Uses AI and Big Data, n.d.). Sephora has created a social media chatbot to enhance the shopping experience. Users can consult with the chatbot and receive product recommendations (How Sephora's Chatbot is Making Personalisation Easier for Customers, n.d.). Nestlé uses AI to monitor discussions about its products on social media. This allows them to respond immediately to customer questions or complaints (How Nestlé Uses AI for Social Media Monitoring, n.d.).

The use of artificial intelligence in small and micro businesses is an equally important aspect of modern business. According to Kaput (2021), artificial intelligence supports greater customer engagement on social media, while AI applications can help managers increase revenue and reduce costs in their businesses.

According to the European Commission (2020), 78% of companies say they know what the term artificial intelligence means, while only 7% do not know and 15% are unsure. Looking at Europe as a whole, companies tend to fall into one of two camps: 'adopters' (42%), who are currently using at least one AI technology, and 'non-adopters' (40%), who are not currently using AI and do not intend to use any of the AI technologies (at least in the next two years).

According to the report – New Report Shows Marketers Lack the Education, Training to Effectively Adopt Artificial Intelligence (n.d.), the majority of marketers know the importance of AI to their business, but 70% of respondents believe a lack of training and education is a barrier to adopting AI in marketing.

According to Gartner survey – Gartner Survey Shows 37 Percent of Organisations have Implemented AI in Some Form (n.d.), 37% of organisations are using AI for content curation and management. According to Gartner, 37% of organisations have implemented AI in some form.

Gartner (2019) also shows interesting results: 37 % of organizations have implemented AI in some form. The survey revealed that the number of organisations implementing artificial intelligence (AI) has increased by 270 % in the last four years, and tripled in the last year. It also found that organisations across all industries are using AI in a variety of applications, but are struggling with an acute talent shortage.

In 2020, 7% of EU enterprises with at least 10 employees were using AI applications. While 2% of enterprises used machine learning to analyse big data internally, 1% analysed big data internally using natural language

processing, natural language generation or speech recognition. A chat service, where a chatbot or virtual agent generates natural language responses to customers, was used in 2% of enterprises. The same proportion of enterprises, 2%, used service robots, which are characterised by a certain degree of autonomy, e.g. to carry out cleaning, dangerous or repetitive tasks, such as removing toxic substances, sorting items in the warehouse, assisting customers in shopping or at payment points, etc. (Eurostat, 2021).

According to the Enehan report (2023), 5.2% of Slovak companies used AI applications in 2021, which puts Slovakia ahead of its neighbours. However, there is still a large group of companies in Slovakia that are not yet using artificial intelligence. Slovakia is still behind the EU average of 7.9%.

The previous survey conducted by Krajčovič (2023) on a sample of 78 Slovak micro-enterprises shows that more than 60% of companies have come across the term artificial intelligence. Almost 30% of the companies have come across the term but do not know exactly what it means and how it is used. Artificial intelligence has been used by 37%, but outside of business activities. No company is using AI for marketing or marketing communications. However, in more than 30% of cases, entrepreneurs said they did not know what benefits artificial intelligence could bring them. Lack of experience and knowledge are among the most common and biggest barriers to adopting artificial intelligence tools.

A study by Bunte, et al. (2021) found that lack of expertise, start-up costs and time investment, infrastructure, resources, experience, and company size are major challenges in implementing AI in SMEs.

5. Suggestions and Recommendations for SMEs in Using AI Tools for Social Media

Based on the results of previous studies and academic papers, the use of artificial intelligence in business is very important, not only for large, but also for small and medium enterprises. Very often, especially in the case of small businesses, and even more often in the case of micro-businesses, we can encounter several barriers and problems when using AI tools. This is also the case when using artificial intelligence to manage social media.

According to Sarmiento (2020), social media is one of the main areas where marketers can boost both performance and efficiency by using AI. The study conducted by Popovic et al. (2018) shows that AI can help micro and small businesses create personalised advertising based on customer data.

Bhalerao et al. (2022) suggest that if SMEs do not adopt available technologies, they may lose their competitive position. The authors also explore issues related to the challenges and benefits of AI adoption in SMEs.

To facilitate the use of AI in social media management and support its integration, especially in micro and small business environments, we provide some recommendations in the form of specific AI-based tools that can be used by these businesses in practice:

- Circleboom Publish

Streamlines social media management across platforms and accounts. It provides a versatile post generator and can be integrated with OpenAI (Chat GPT). Using this tool simplifies content creation by providing AI-generated images and text that can be published to managed social media.

In addition, this tool is designed to efficiently schedule, design and publish posts, allowing users to seamlessly manage multiple social media accounts at once. It also allows users to create and design images, text and captions, and enhance posts with trending and relevant hashtags.

- Content Studio

Makes it easy to create Instagram captions, generate tweet ideas, inspirational quotes or content for entire posts. It also offers a variety of AI-generated images for individual social media posts, as well as a number of ready-made templates that can be used to create original posts.

Using AI, the tool can suggest relevant and popular hashtags for posts, make posts more visually appealing by analysing the tone of the text and adding appropriate emoticons, or create eye-catching images for your social posts by simply entering text descriptions.

- Cortex

Helps you publish optimised content. It also recommends when and how often to publish posts based on historical metrics. It also generates detailed competitive analysis and provides a dashboard with an interface

that highlights posts and a publishing schedule. It also identifies the colours that appeal most to audiences when submitting one or more photos, helping you to make the best decision.

- Flick

Allows you to create social media content faster and at scale. It speeds up the process of brainstorming, writing and scheduling posts for marketing managers. It can also help generate original and engaging ideas based on a variety of topics. Other features include: scheduling, hashtag creation and campaign analysis.

- Heyday

This conversational AI social media tool interacts with users in real time. It allows you to have the highest quality interactions while improving the user experience.

- Lately

Allows you to extract context from a larger collection of content, which can then be used to create social posts that promote that content. Other features include social media project planning and management, and metrics analysis.

- Linkfluence

Allows you to monitor and analyse all managed social media channels. It also provides valuable insights that make it easier to understand social media audiences. It also measures the evolution of brand identity on social media before setting smart targets, and predicts and analyses customer trends.

- QuillBot

Allows you to summarise and paraphrase existing content into entirely new versions, which means it can help you create new content. Compatible with multiple web browsers and text editors. It preserves the original context when rewriting. At the same time, it can help to improve vocabulary, which also enriches individual posts.

- Socialbakers

This AI-driven social media management platform provides advanced audience insights, expanding the possibilities of using social networks for marketing and marketing communications. This tool also offers: advanced audience statistics, intelligent scheduling and optimal posting times or multi-channel social media account management.

- Wordstream

This tool allows you to improve the performance of your ads online, including social media. It helps evaluate PPC ads on social networks and provides data-driven recommendations. It is useful for businesses of all sizes, including those involved in online sales and marketing.

6. Conclusion

Artificial intelligence has penetrated, or is gradually penetrating, all industries, with a dramatic impact on their development and direction. In the field of marketing and marketing communications, it offers opportunities to streamline individual marketing activities - from planning to the implementation of strategic solutions. AI makes it easier, faster and more efficient to implement individual activities, increasing their applicability even in the environment of small and micro enterprises, which generally lack resources in terms of both human and financial resources, as well as experience in implementing marketing solutions.

The impact of AI on social media is also significant. AI is helping social media marketers create engaging content, schedule posts effectively, segment content, analyse campaigns and more. According to the 2020 Social Media Industry Benchmark Report (2020), success in social media is about much more than getting the most comments or likes: it's about increasing engagement and growing or maintaining the percentage of your audience that is engaged as you grow your audience. This is why it is essential to incorporate AI tools into social media management and use them to their full potential when communicating with your customers. Social media marketing is one of the key areas where marketers can improve both performance and efficiency through the use of artificial intelligence. AI extracts more value and engagement from every online conversation that takes place on social media channels.

The use of artificial intelligence in the environment of small and micro enterprises can therefore be a key element in the process of increasing their competitiveness and achieving their goals, without radically increasing expenditure on the services of advertising or communication agencies. With the help of AI tools, they will be able to carry out many of the activities for which they were previously unable. At the same time, the use of AI can help such businesses overcome other barriers associated with the use of social media or AI - indeed, several studies show the limited ability to use them in the environment of small and micro enterprises.

In this paper, in addition to these aspects, we have also highlighted the importance and relevance of using AI in marketing communications. We have presented the current scientific knowledge and the authors' views on this issue, as well as the results of empirical studies on the use of AI in business environments.

A particularly specific situation in this direction can be found in the environment of micro-enterprises in Slovakia. According to the survey conducted by Krajčovič (2023) at the end of last year, none of the business entities used artificial intelligence for marketing and marketing communication. Although, according to the results of the Eurostat (2021) survey, companies in Slovakia use AI systems the most of all V4 countries, these are mainly medium and large companies with a technological or technical focus.

The use of artificial intelligence in the process of social media management and social media marketing communication can ultimately also help to use these communication channels more efficiently. The benefit for small and micro businesses can therefore be an overall improvement in marketing communication activities. The importance and need for the use of artificial intelligence in this area is also demonstrated by the fact that AI for the social media market is predicted to grow to more than \$2.1 billion by 2023 (Anandvardhan, 2021).

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References

- 2020 Social Media Industry Benchmark Report. (2020). Retrieved March 4, 2022, from <https://www.rivaliq.com/blog/social-media-industry-benchmark-report/#title-financial-services>
- Agnihotri, R. (2020). Social media, customer engagement, and sales organizations: A research agenda. *Industrial Marketing Management*, 90, 291–299. <https://doi.org/10.1016/j.indmarman.2020.07.017>
- Anandvardhan. (2021). Role of Artificial Intelligence in Social Media Marketing. *International Journal of Business Analytics & Intelligence*, 9(1 & 2), 34–40.
- Argan, M., Dinc, H., Kaya, S., & Argan, M. T. (2022). Artificial Intelligence (AI) in Advertising: Understanding and Schematizing the Behaviors of Social Media Users. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal Regular Issue*, 11(3), 331-348
- Bhalerao, K., Kumar, A., Kumar, A., & Pujari, P. (2022). A study of barriers and benefits of artificial intelligence adoption in small and medium enterprise. *Academy of Marketing Studies Journal*, 26, 1-6.
- Budiyanto, A., Pamungkas, I. B., & Praditya, A. (2022). Pengaruh Media Sosial Terhadap Minat Beli dan Keputusan Pembelian Konsumen; Analisis Bibliometrik. *Jurnal Ekonomi dan Manajemen*, 8(2), 133–142.
- Bunte, et al. (2021). A study of barriers and benefits of artificial intelligence adoption in small and medium enterprise. *Academy of Marketing Studies Journal*, 26(1), 1-6.
- Castillo, C., Mendoza, M., & Poblete, B. (2013). Predicting information credibility in time-sensitive social media. *Internet Research*, 23(5), 587-617. DOI:10.1108/IntR-05-2012-0095
- Chintalapati, S., & Pandey, S. K. (2022). Artificial intelligence in marketing: A systematic literature review. *International Journal of Market Research*, 64(1), 38–68. <https://doi.org/10.1177/14707853211018428>
- Chui, M., et al. (2018, November 28). Applying artificial intelligence for social good. Retrieved from <https://www.mckinsey.com/featured-insights/artificial-intelligence/applying-artificial-intelligence-for-social-good>
- Coca-Cola Turns to Facebook Messenger for Chatbot Customer Service. (n.d.). *Chatbots Magazine*. <https://chatbotmagazine.com/coca-cola-turns-to-facebook-messenger-for-chatbot-customer-service-30b365d073c0>
- Columbus, L. (2020). Six Areas Where AI Is Improving Customer Experiences. *Forbes*. Retrieved March 27, 2022, from <https://www.forbes.com/sites/louiscolombus/2020/04/29/six-areas-where-ai-is-improving-customer-experiences/?sh=3b939103f5bc>
- Davidson, T., Warmesley, D., Macy, M., & Weber, I. (2017). Automated hate speech detection and the problem of offensive language. In *Proceedings of the 11th International AAAI Conference on Web and Social Media (ICWSM '17)*, Vol. 17 (pp. 512–515).
- Enehano. (2023, April 20). Slovensko vo využívaní umelej inteligencie predbehlo susedov. *Technológie však nemôžu fungovať bez ľudí*. <https://www.enehano.sk/blog/napisali-o-nas-slovensko-vo-vyuzivani-umelej-inteligencie-predbehlo-susedov-technologie-vsak-nemozu-fungovat-bez-ludi>

- European Commission. (2020). European Enterprise Survey on the Use of Technologies Based on Artificial Intelligence. <https://www.ipsos.com/sites/default/files/ct/publication/documents/2020-09/european-enterprise-survey-and-ai-executive-summary.pdf>
- Eurostat. (2021, April 13). Artificial intelligence in EU enterprises. Retrieved from <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210413-1?redirect=%2Feurostat%2Fhome%3F>
- Gao, J., Bi, W., Liu, X., Li, J., & Shi, S. (2019). Generating multiple diverse responses for short-text conversation. In Proceedings of the AAAI Conference on Artificial Intelligence (pp. 6383-6390).
- Gartner Survey Shows 37 Percent of Organizations have Implemented AI in Some Form. (n.d.). Retrieved April 25, 2021, from <https://www.gartner.com/en/newsroom/press-releases/2019-01-21-gartner-survey-shows-37-percent-of-organizations-have>
- Gartner. (2019, January 21). Gartner Survey of More Than 3,000 CIOs Reveals That Enterprises Are Entering the Third Era of IT. Retrieved from <https://www.gartner.com/en/newsroom/press-releases/2019-01-21-gartner-survey-shows-37-percent-of-organizations-have>
- Go, A., Huang, L., Bhayani, R., & Huang, L. (2009). Twitter sentiment classification using distant supervision. CS224N Project Report, Stanford.
- Goodfellow, I., Bengio, Y., Courville, A., & Bengio, Y. (2016). Deep Learning. MIT Press Cambridge.
- How Airbnb Uses AI and Big Data. (n.d.). Becoming Human. <https://becominghuman.ai/how-airbnb-uses-ai-and-big-data-40e959f57e77>
- How Amazon Uses AI for Customer Service. (n.d.). Digiday. <https://digiday.com/marketing/amazon-turning-ai-chatbots-customer-service/>
- How Facebook Uses Artificial Intelligence. (n.d.). Algorithmia Blog. <https://algorithmia.com/blog/how-facebook-uses-artificial-intelligence>
- How Nestlé Uses AI for Social Media Monitoring. (n.d.). IDG Connect. <https://www.idgconnect.com/interviews/1506117/nestle%20ai-monitoring-its-social-media-mentions>
- How Netflix Uses AI to Predict Your Next Binge-Worthy Show. (n.d.). OpenAI Blog. <https://blog.openai.com/how-netflix-uses-ai-to-predict-your-next-binge-worthy-show/>
- How Sephora's Chatbot is Making Personalization Easier for Customers. (n.d.). PYMNTS.com. <https://www.pymnts.com/news/retail/2019/sephora-personalization-chatbot-ai-messaging-beauty/>
- How Starbucks Uses Artificial Intelligence for Customer Engagement. (n.d.). Relevance. <https://www.relevance.com/how-starbucks-uses-artificial-intelligence-ai-machine-learning-for-customer-engagement/>
- Huang, M.-H., & Rust, R. T. (2021). Engaged to a robot? The role of AI in service. Journal of Service Research, 24(1), 30–41. <https://doi.org/10.1177/1094670520902266>
- Kaput, M. (2021). 9 AI Tools to Streamline Your Social Media Strategy. Retrieved March 27, 2022, from <https://blog.hubspot.com/marketing/ai-social-media-tools>
- Kaput, M. (2022). What Is Artificial Intelligence for Social Media? Marketing AI Institute. Retrieved March 27, 2022, from <https://www.marketingaiinstitute.com/blog/what-is-artificial-intelligence-for-social-media>
- Khokhar, P. (2019). Evolution of artificial intelligence in marketing, comparison with traditional marketing. Our Heritage, 67(5), 375–389.
- Kietzmann, J., Paschen, J., & Treen, E. (2018). Artificial intelligence in advertising: How marketers can leverage artificial intelligence along the consumer journey. Journal of Advertising Research, 58(3), 263-267.
- Krajčovič, P. (2024). The use of artificial intelligence in the marketing communications of micro-enterprises. In T. Klieštík (Ed.), Globalization and its socio-economic consequences: 23rd international scientific conference (pp. xx-xx). Žilina: Žilinská univerzita v Žiline. (in press)
- New Report Shows Marketers Lack the Education, Training to Effectively Adopt Artificial Intelligence. (n.d.). Retrieved April 23, 2021, from <https://www.marketingaiinstitute.com/blog/2021-state-of-marketing-ai-report-launch>
- Next Move Strategy Consulting. (2023). Artificial intelligence: Global opportunity analysis and industry forecast 2022-2023. Retrieved from <https://www.nextmsc.com/report/artificial-intelligence-market>
- Pariser, E. (2011). The Filter Bubble: What the Internet is Hiding from You. Penguin.
- Popovic, A., Hackney, R., & Tassabehji, R. (2018). The Impact of Artificial Intelligence in Marketing. Journal of Business Research, 98(2), 261-276.
- Quadros, M. (2020, September). Artificial intelligence in social media marketing. Retrieved from <https://www.socialbakers.com/blog/ai-in-social-media>
- Resqi, M. (2022). Marketing Communications: A Bibliometric Study In The Use Of Technology And Social Media For Marketing [Komunikasi Pemasaran: Studi Bibliometrik Dalam Penggunaan Teknologi Dan Media Sosial Untuk Pemasaran]. Volume 3, (October), 4194–4203.
- Rodgers, S. (2021). Themed issue introduction: Promises and perils of artificial intelligence and advertising. Journal of Advertising, 50(1), 1–10.
- Sadiku, M. N. O., Ashaolu, T. J., Ajayi-Majebi, A., & Musa, S. M. (2021). Artificial Intelligence in Social Media. International Journal of Scientific Advances, 2(1), 2708-7972.
- Sarmiento, H. (2020, May). How artificial intelligence can benefit the social media user. Clyste. <https://medium.com/clyste/how-artificial-intelligence-can-benefit-the-social-media-user-aeaefd24e0a7>
- Thormundsson, B. (2023, October 26). Artificial Intelligence (AI) market size/revenue comparisons 2018-2030. Retrieved from <https://www.statista.com/statistics/941835/artificial-intelligence-market-size-revenue-comparisons/>

Tractica Research Report. (2020). Artificial Intelligence for Telecommunications Applications.
<https://omdia.tech.informa.com/topic-pages/artificial-intelligence>