

THE ROLE OF ARTIFICIAL INTELLIGENCE IN THE SUSTAINABILITY OF MARKETING ACTIVITIES: CONTROL OF DIGITAL MARKETING ACTIVITIES AND DIGITAL ANALYTICS

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The control of digital marketing activities plays a central role in strategic management, ensuring the alignment of marketing initiatives with organizational objectives and long-term sustainability goals. In recent years, digital marketing control has increasingly been operationalized through advanced digital analytics tools, which are further enhanced by artificial intelligence (AI) technologies. The integration of AI enables more accurate monitoring and evaluation of marketing campaign performance, supports advanced levels of personalization, and facilitates real-time, data-driven decision-making, thereby improving both operational efficiency and strategic effectiveness. Despite the growing body of research on digital marketing analytics and AI applications, there remains a limited understanding of how AI-based tools specifically contribute to the control function of digital marketing and how these contributions translate into sustainability and competitive performance outcomes. This paper adopts a descriptive-analytical research approach, drawing on a comprehensive review of relevant academic and professional literature in the fields of digital marketing, digital analytics, marketing control, and AI. Furthermore, the study employs a case study analysis based on multiple approach of selected companies that apply AI-based tools in the control of digital marketing activities.

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1 Introduction

The use of artificial intelligence (AI) in digital marketing increasingly contributes to the reduction of resource waste and the advancement of sustainable business practices encompassing economic, environmental, and social dimensions (Gündüzyeli, 2024). AI can be applied in marketing research, segmentation, targeting, positioning, and operational activities based on different levels of artificial intelligence, including mechanical AI, thinking AI, and feeling AI (Huang et al., 2021).

At the same time, AI is redefining contemporary marketing strategies within digital environments, enabling more advanced forms of analytics and decision-making processes (van Esch & Stewart Black, 2019).

In this context, the application of AI in digital marketing can be understood through two complementary perspectives: as a tool that supports sustainable marketing and business activities, and as a technology that promotes sustainable development and environmental responsibility.

The aim of this paper is to examine the role of artificial intelligence in digital marketing through the lens of sustainability, with particular emphasis on personalization, ethics, and transparency. By analyzing contemporary academic studies and practical marketing campaigns, the paper demonstrates how the integration of AI technologies and sustainability principles is transforming the way brands communicate with consumers and shape their marketing strategies in the digital era.

2 Literature review

The literature addresses key themes related to the role of AI in digital marketing, including sustainability, personalization, marketing analytics and control, ethical considerations, consumer trust, eco-friendly marketing practices, and the need for a more integrated and system-oriented scientific development of the field.

The use of AI in digital marketing campaigns contributes to the reduction of resource waste, and sustainable practices are analyzed from the perspective of their contribution to marketing sustainability as well as to economic, environmental, and social objectives (Gündüzyeli, 2024). AI is redefining marketing strategies within the digital environment (van Esch & Stewart Black, 2019).

Accordingly, the application of AI in digital marketing activities can be analyzed through two integrated approaches: the contribution of AI to sustainable marketing and business activities, and AI as a tool for promoting sustainable development and environmental responsibility.

The contribution of AI to sustainable marketing and business activities is reflected in the use of AI to identify customer preferences and to enable product delivery without explicit ordering (Agrawal et al., 2018), as well as in the deployment of AI agents to enhance salesforce capabilities (Davenport et al., 2020). The study by Aljumah et al. (2025) examines sustainable digital marketing behavior among employees that supports sustainable marketing practices. The application of AI in marketing also encompasses the examination of personalization, analytics, ethics, and consumer trust (Mustak et al., 2021).

Responsible and sustainable digital marketing practices contribute to trust in AI and lead to positive purchasing outcomes (Alsaffarini & Awwad, 2026).

The literature review, also, includes studies that analyze the relationship between AI and the management, control, and optimization of digital marketing activities. Digital analytics influences activity control and business sustainability (Wamba et al., 2017) and reshapes the management of marketing processes (Erevelles et al., 2016). Big data analytics transforms the management of the entire marketing process (Erevelles et al., 2016). Key AI technologies in marketing include machine learning, chatbots, recommendation algorithms, and big data analytics (Kumar et al., 2019). The study by Wedel and Kannan (2016) indicates that marketing analytics encompasses analytics for optimizing investments in the marketing mix within big data environments, analytics for personalization, and analytics in the context of user privacy and data security (Wedel & Kannan, 2016).

On the other hand, AI contributes to the personalization of environmentally conscious content by aligning marketing activities with responsible environmental practices (Acatrinei et al., 2025), which in turn shapes consumer perceptions toward environmentally friendly brands (Garg et al., 2025). In this context, the literature addresses the issue of sustainable and responsible AI-driven marketing (Le, 2025), where sustainable marketing directs economic strategies toward balancing economic objectives with the preservation of natural resources (Hollensen et al., 2017). AI is also employed as a tool for eco-branding and the creation of content aligned with environmental values by well-known brands such as Unilever and IKEA (Green City Times, n.d.).

The further development and application of AI in digital marketing will be closely linked to the ethical use of AI, as ethical AI practices influence socially responsible and sustainable marketing outcomes (Zeng et al., 2021). Moreover, the adoption of AI in marketing activities depends on trust and ethical implementation, which are critical for sustainability in digital marketing (Puntoni et al., 2021). In addition, studies also highlight the need for the scientific development of marketing based on a structure–system approach aims to foster scientific convergence and integration (Golinelli et al., 2012) and to reduce the influence of a strong reductionist perspective, which is primarily focused on individual actors and transactions (Tronvoll et al., 2017).

The literature review indicates a limited number of empirical studies that quantify how AI in digital marketing influences companies' actual sustainable performance outcomes.

The aim of this paper is to examine the role of artificial intelligence in digital marketing through the lens of sustainability, with a particular focus on personalization, ethics, and transparency. By analyzing current academic studies and practical marketing campaigns, the paper demonstrates how the integration of AI tools and sustainable principles is transforming the way brands communicate with consumers and shape their marketing strategies in the digital era.

3 Methodology

Based on the literature that highlights the key principles of AI-driven marketing and sustainable practices (Hollensen, Kotler, & Opresnik, 2017; Puntoni et al., 2021; van Esch & Stewart Black, 2019), as well as the importance of controlling digital activities and ensuring transparency (Martin & Murphy, 2017; Zeng et al., 2021), this paper employs case studies to examine how theoretical recommendations are translated into practical marketing campaigns that combine personalization, consumer engagement, and environmental responsibility. The literature indicates that, while there is a substantial body of theoretical and quantitative research on AI in marketing, there is a relative lack of in-depth analyses focusing on the implementation of AI in sustainable marketing campaigns.

The study adopts a qualitative approach to investigate the role of AI in sustainable digital marketing through the analysis of case studies of leading global brands: Nike, Starbucks, and Nestlé.

The analysis is based on the use of both primary and secondary data sources, including official company reports, marketing campaign reports and promotional materials, as well as academic articles and publications that examine the application of AI in digital marketing.

The study employs a thematic analysis based on a hybrid coding strategy, combining deductive categories derived from the literature with inductive insights emerging from the case data. A comparative analytical framework is applied to identify similarities and differences in how AI is operationalized across the selected companies.

The case study analysis encompasses three companies selected on the basis of the availability of publicly accessible data indicating the use of AI-driven sustainable marketing in their operations, as well as documented outcomes in terms of consumer engagement and environmental responsibility.

The thematic analysis is grounded in key categories identified in the literature: AI-driven personalization, sustainability, consumer engagement, and ethical and transparent practices.

This methodological design enables a systematic comparison of corporate practices and facilitates the integration of theoretical perspectives with empirical observations. However, the study is limited by its reliance on secondary data sources and the absence of direct access to proprietary corporate AI systems.

4 Results

Nike, Starbucks, and Nestlé operate in different business sectors and follow distinct business orientations (Nike is product-oriented with a focus on sports footwear and apparel; Starbucks is service-oriented; and Nestlé is product-oriented with a focus on food and beverages). The following section of the analysis presents the ways in which AI is utilized within the domain of digital marketing.

Nike implements sustainable practices across the entire value chain, starting from product design and manufacturing to product distribution, with the aim of reducing emissions and eliminating waste. The application of AI is reflected in the following segments:

Nike Fit: AI is used to determine the optimal shoe size based on individual foot measurements. The AI model calculates the most suitable size for each Nike shoe model using Nike Fit, a digital feature integrated into the Nike app that employs computer vision, machine learning, and AI to scan foot dimensions via a smartphone camera and accurately measure the shape, length, and width of both feet. Nike Fit is also used in retail stores to assist sales staff in recommending the most appropriate shoe size for each customer (Nike unveils Nike Fit, n.d.).

Move to Zero: A program aimed at achieving zero carbon emissions and zero waste, including the development of products made from recycled materials (Nike, n.d.). The company reported its contributions to sustainability in 2024 (Nike, n.d.), including the following achievements:

- A 69% reduction in absolute Scope 1 and Scope 2 greenhouse gas (GHG) emissions from Nike’s own operations.
- A 36% reduction in absolute Scope 3 GHG emissions related to Nike’s manufacturing and transportation activities.

- 96% of electricity consumption across Nike’s global operations sourced from renewable energy.
- 100% of operational waste generated by Nike’s strategic finished-goods suppliers diverted from landfills, with more than 60% reused or recycled.
- Less than 1% of inbound air freight used for transporting Nike products.
- A more than 40% reduction in freshwater (potable water) consumption among Nike’s material suppliers over the past decade.

Nestlé’s marketing campaigns emphasize environmentally responsible practices, including the use of packaging made from recycled or biodegradable materials, the promotion of products with a reduced environmental footprint, and transparent communication regarding sustainable suppliers and the ethical sourcing of raw materials. In addition, the company highlights initiatives aimed at food redistribution across the country, as well as the reduction of food waste, operational costs, and carbon emissions (Hall, 2025).

The key characteristics of the identified food waste include edibility, lack of economic viability for sale, and an excessively short shelf life. According to company estimates, approximately 700 tons of high-quality food—equivalent to 1.5 million meals—could be saved, thereby preventing up to 1,400 tons of CO₂ emissions and generating savings of up to £14 million in operational costs.

Nestlé employs the Zest software solution, which enables the redistribution of surplus food to more than 8,000 charitable organizations and local communities across the United Kingdom. The implementation of this system resulted in a reduction of edible food waste by more than 87% in one factory during the first two weeks of the pilot period (Hall, 2025).

The research identified key aspects of AI utilization at Nestlé, including:

- Creation of personalized content using digital twins for generating high-quality product visuals for e-commerce and digital media (Nestlé is creating AI-powered ‘digital twins’ for brands like Purina, Nescafé Dolce Gusto, and Nespresso, 2025). Digital twins, as 3D replicas of physical products, enable digital customization or localization of product packaging across different

environments. New creative content can be generated using AI without the need for reshooting.

- AI for revitalizing and adapting legacy advertisements for digital and social media platforms. Using Reelmind.ai, the company modernized classic ad campaigns such as Nescafé Gold Blend and KitKat Break (Nestlé’s marketing magic: AI recreation of classic ad campaigns with modern twists, 2025). Key aspects of campaign revitalization include enhancing the resolution of old ads, employing AI to generate additional scenes, and integrating content for social media and interactive formats.
- AI for consumer experience personalization (Nestlé, 2021)
- Nestlé employs AI chatbots, such as Cookie Coach, which respond to consumer questions regarding recipes and preferences. This represents a component of personalized digital marketing and user engagement.
- AI as a digital assistant and customer support tool (Hamstra, 2021)

The company also utilizes Toll House as a digital baking assistant that doubles as customer support. Toll House features a photorealistic video avatar, Ruth, who leverages AI to answer baking-related questions, resolve issues that arise during the baking process, and assist users in creating personalized cookie recipes.

Starbucks implements various digital campaigns that combine personalization of the customer experience with sustainable initiatives, including reducing plastic usage, promoting recycling, and supporting sustainable coffee suppliers (Starbucks Coffee Company, 2026). Starbucks leverages AI through the following tools:

- Green Dot Assist – An AI-powered tool that functions as a real-time companion for café partners, providing quick responses ranging from recipe guidance to service information (Phanse, 2026).
- Smart Queue – AI technology that optimizes order flow within the café, enabling faster and more efficient delivery of orders to customers while intelligently scheduling employee shifts (Phanse, 2026).
- Deep Brew – An internal AI system that employs machine learning to enhance business operations and customer experience. The system analyzes data from 17 million app users to personalize messaging, optimize staff schedules, and manage inventory. Implementation of Deep Brew has resulted in a 30% increase

in return on investment and a 15% growth in customer engagement (Chapman, 2026). Deep Brew analyzes data from the Starbucks Rewards app to personalize offers and improve the customer experience. In 2026, Starbucks redesigned its loyalty program to encourage upgrades to higher membership tiers, thereby strengthening engagement and increasing transaction volume (Starbucks Coffee Company, 2026). Different loyalty levels—Green, Gold, and Reserve—allow AI to accurately segment members and create personalized campaigns for each segment.

When using the mobile ordering app, AI systems can track customer choices, tailor future recommendations, and offer discounts for reusable cups based on consumer habits. These predictions also enable more accurate inventory planning and waste reduction in line with the Reusable Revolution program. Starbucks has developed several sustainability initiatives, including:

- Towards a Sustainable Cup – Cold beverage cups containing 10–20% less plastic, compostable or paper straws, and recyclable lid stickers replacing traditional plastic plugs; customers using their own reusable cup receive a \$0.10 discount on beverages (Starbucks Coffee Company, n.d.).
- C.A.F.E. Practices – An ethical coffee sourcing program that promotes sustainable cultivation practices based on over 200 indicators assessing farms according to economic, social, and environmental criteria. AI assists in monitoring supplier data, identifying areas requiring improvement or intervention, and highlighting the most effective coffee cultivation practices (Starbucks Coffee Company, n.d.; Starbucks Coffee Company, 2024).

Based on the analysis of the three companies, the following characteristics of AI usage can be identified: personalization, enhancing customer practices and ethics (Table 1):

Table 1: AI - context digital marketing

Contributions	Nike	Nestle	Starbucks
Personalization	Nike Fit	Digital twins	Deep Brew
Enhancing customer experience	Nike Fit - korisnička podrška	Chatbots	Loyalty program
Sustainable practices	Move to Zero	Zest software	Reusable cups, reduced plastic, sustainable coffee sourcing
Ethics	Ethical sourcing	Ethical sourcing, transparent reporting	Monitoring supplier practices, ethical coffee cultivation

Source: author, based on research

5 Analysis and discussion

The integration of technology and ecological initiatives contributes to stronger consumer engagement and a reduced environmental footprint, in line with theoretical and empirical findings on AI and sustainable marketing (Hollensen, Kotler & Opresnik, 2017; van Esch & Stewart Black, 2019; Puntoni et al., 2021).

Analyses indicate that personalized campaigns enhance customer loyalty and encourage positive behavior toward sustainable practices. Consumers who receive digital reminders about reusable cups or sustainable products are more likely to use them, reducing waste and increasing the social value of the campaigns.

AI-driven campaigns also boost consumer engagement and brand loyalty, particularly among customers who value sustainability. Precise targeting minimizes unnecessary promotional materials, further contributing to waste reduction. Beyond personalization, AI improves operational efficiency and customer convenience. Starbucks' Smart Queue optimizes order flow and staff scheduling, reducing wait times, while Nike Fit supports in-store sales personnel, and Nestlé's Toll House digital assistant guides users through personalized baking experiences. These tools demonstrate how AI enhances the holistic customer experience by combining digital and physical touchpoints, resulting in measurable improvements in satisfaction and engagement (Chapman, 2026; Hamstra, 2021).

Sustainable Practices Sustainability is a core component of AI integration for all three companies. Nike's Move to Zero program, supported by AI analytics, has led to significant reductions in greenhouse gas emissions, energy consumption, and operational waste. Nestlé leverages AI for food redistribution (via Zest software), eco-packaging, and responsible sourcing, while Starbucks uses AI predictions to support reusable cup programs and sustainable coffee sourcing through the C.A.F.E. Practices framework. These initiatives highlight how AI enables companies to optimize resource use, reduce environmental impact, and align business operations with sustainability goals (Nike, n.d.; Starbucks Coffee Company, n.d.; Hall, 2025).

Ethical Practices and Transparency AI, also, supports ethical decision-making and transparency. Nestlé and Starbucks use AI to monitor supply chains and identify areas requiring intervention, while Nike ensures ethical supplier practices and waste management. Transparent communication of sustainability metrics, combined with AI-driven monitoring, strengthens stakeholder trust and reinforces the companies' reputations as responsible corporate actors (Zeng et al., 2021; Puntoni et al., 2021).

6 Conclusion

Artificial intelligence in the context of sustainable digital marketing enables advanced personalization and data-driven customer analysis, resulting in more precise targeting and a reduction in unnecessary resource consumption. However, the effectiveness of AI implementation is not solely technical, but also depends on transparent data governance and ethical management practices, which play a critical role in building consumer trust and ensuring long-term brand credibility.

The case studies of Nike, Nestlé, and Starbucks illustrate that AI can function as an integrative mechanism linking operational efficiency, customer experience, and sustainability objectives. Across the analyzed cases, AI-driven systems contribute to the optimization of resource allocation and the reduction of environmental impact through improved targeting and predictive analytics. The analysis indicates that companies across different sectors (product- and service-oriented) integrate AI into digital marketing strategies in distinct ways aligned with their business models and sustainability objectives.

Nevertheless, differences in strategic emphasis are evident: Starbucks primarily focuses on supply chain optimization and waste reduction, Nestlé emphasizes personalization to minimize product and packaging waste, while Nike integrates AI with sustainability-oriented branding strategies, including recycling initiatives and digital customization.

Overall, the findings suggest that AI is not merely an operational tool, but a strategic enabler of sustainable marketing transformation, facilitating alignment between business performance, consumer engagement, and environmental responsibility. At the same time, the analysis highlights that the impact of AI is contingent upon ethical implementation, transparency, and the continuous adaptation of corporate strategies to evolving consumer and environmental expectations. In addition to the aforementioned contributions, the study also has certain limitations. The analysis is based on a limited number of companies, which affects the generalizability of the results across all industries or markets. Additionally, small and medium-sized enterprises and local initiatives were not included. The analysis of campaigns is primarily qualitative and descriptive rather than quantitative, which may limit the precise measurement of AI's effects on consumer behavior and sustainability.

References

- Acatrinei, C., Apostol, I. G., Barbu, L. N., Chivu, R.-G., & Orzan, M.-C. (2025). Artificial intelligence in digital marketing: Enhancing consumer engagement and supporting sustainable behavior through social and mobile networks. *Sustainability*, *17*(14), 6638. <https://doi.org/10.3390/su17146638>
- Agrawal, A., Gans, J. S., & Goldfarb, A. (2018). *Prediction machines: The simple economics of artificial intelligence*. Harvard Business School Press.
- Aljumah, A. I., Nuseir, M., & El Refae, G. (2025). Employee behavior in sustainable digital marketing: The role of AI technologies in the UAE. *Administrative Sciences*, *15*(12), 491. <https://doi.org/10.3390/admsci15120491>
- Alsaffarini, E., & Awwad, B. S. (2026). Artificial Intelligence in Sustainable Marketing: How AI personalization impacts consumer purchase decisions. *Sustainability*, *18*(2), 1123. <https://doi.org/10.3390/su18021123>
- Chapman, T. (2026). Coca-Cola, Nike & Starbucks: Inside retailers' AI strategies. *AI Magazine*. <https://aimagazine.com/news/coca-cola-nike-starbucks-retailer-ai-strategies>
- Davenport, T. H., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, *48*(1), 24–42. <https://doi.org/10.1007/s11747-019-00696-0>
- Erevelles, S., Fukawa, N., & Swayne, L. (2016). Big data consumer analytics and the transformation of marketing. *Journal of Business Research*, *69*(2), 897–904. <https://doi.org/10.1016/j.jbusres.2015.07.001>

- Garg, V., Bohara, S., & Srivastav, A. (2025). AI-driven sustainability marketing transforming consumers' perception toward eco-friendly brands. *Discover Sustainability*, 6, 984. <https://doi.org/10.1007/s43621-025-01934-y>
- Golinelli, G. M., Barile, S., Saviano, M., & Polese, F. (2012). Perspective shifts in marketing: toward a paradigm change?. *Service Science*, 4(2), 121-134. <https://doi.org/10.1287/serv.1120.0015>
- Green City Times. (n.d.). *Eco-Friendly Branding with AI*. *Green City Times*. Retrieved February 3, 2026, from <https://www.greencitytimes.com/eco-friendly-branding-with-ai/>
- Gündüzyeli, B. (2024). Artificial intelligence in digital marketing within the framework of sustainable management. *Sustainability*, 16(23), 10511. <https://doi.org/10.3390/su162310511>
- Hall, R. (2025). AI tool trial could save equivalent of 1.5m meals in food waste. *The Guardian*. <https://www.theguardian.com/environment/2025/may/27/food-companies-edible-waste-charities-ai-tool-trial>
- Hamstra, M. (2021). Nestlé Toll House debuts AI 'Cookie Coach' amid home baking boom. *CO- by US Chamber of Commerce*. <https://www.uschamber.com/co/good-company/launch-pad/nestle-toll-house-digital-avatar>
- Hollensen, S., Kotler, P., & Opresnik, M. O. (2017). Sustainability marketing. *Journal of Macromarketing*, 37(2), 246–257. <https://doi.org/10.1177/0276146717692825>
- Huang, M. H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the academy of marketing science*, 49(1), 30-50. <https://doi.org/10.1007/s11747-020-00749-9>
- Kumar, V., Dixit, A., Javalgi, R. G., & Dass, M. (2019). Artificial intelligence in marketing: Current research and future directions. *Journal of Interactive Marketing*, 45, 91–105. <https://doi.org/10.1016/j.intmar.2018.12.002>
- Le, T. U. (2025). Global research trends in digital marketing: A bibliometric analysis from Scopus (2015–2025). *International Journal of Scientific Research and Management (IJSRM)*, 13(11), 95–104. <https://doi.org/10.18535/ijrm/v13i11.com01>
- Mustak, M., et al. (2021). Artificial intelligence in marketing: A systematic literature review. *Journal of Business Research*, 124, 329–346. <https://doi.org/10.1016/j.jbusres.2020.11.039>
- Nestlé. (2021). Delicious Toll House chocolate chip cookie recipe. *Nestlé*. <https://www.nestle.com/stories/timeless-discovery-toll-house-chocolate-chip-cookie-recipe>
- Nestlé is creating AI-powered 'digital twins' for brands like Purina, Nescafé Dolce Gusto and Nespresso. (2025). *Process and Control Today*. <https://www.pandct.com/news/nestl%C3%A9-is-creating-ai-powered-digital-twins-for-brands-like-purina-nescafe-dolce-gusto-and-nespresso/>
- Nestlé's marketing magic: AI recreation of classic ad campaigns with modern twists. (2025). *ReelMind.ai*. <https://reelmind.ai/blog/nestle-s-marketing-magic-ai-recreation-of-classic-ad-campaigns-with-modern-twists>
- Nike. (n.d.). Move to Zero. <https://www.nike.com/sustainability>
- Nike unveils Nike Fit: A new AR feature within the Nike app. (n.d.). *Wear Global Network*. <https://www.wearglobalnetwork.com/news/nike-unveils-nike-fit-a-new-ar-feature-within-the-nike-app>
- Phanse, B. (2026). Supporting the moments that matter with artificial intelligence. *Starbucks*. <https://about.starbucks.com/press/2026/supporting-the-moments-that-matter-with-artificial-intelligence/>
- Puntoni, S., et al. (2021). Consumers and artificial intelligence. *Journal of Marketing*, 85(1), 131–151. <https://doi.org/10.1177/0022242920967852>
- Starbucks Coffee Company. (2026). Starbucks unveils reimagined loyalty program to deliver more meaningful value, personalization and engagement to members. *Starbucks*. <https://about.starbucks.com/press/2026/starbucks-unveils-reimagined-loyalty-program-to-deliver-more-meaningful-value-personalization-and-engagement-to-members/>
- Starbucks Coffee Company. (n.d.). *Coffee*. <https://www.starbucks.com/responsibility/sourcing/coffee/>

- Starbucks Coffee Company. (2024). *C.A.F.E. Practices: Starbucks Approach to Ethically Sourcing Coffee - About Starbucks*. <https://about.starbucks.com/press/2024/caf-practices-starbucks-approach-to-ethically-sourcing-coffee/>
- Tronvoll, B., Barile, S., & Caputo, F. (2017). A systems approach to understanding the philosophical foundation of marketing studies. In: *Social dynamics in a systems perspective* (pp. 1-18). Cham: Springer International Publishing.
- van Esch, P., & Stewart Black, J. (2019). Artificial intelligence (AI): Revolutionizing digital marketing. *Australasian Marketing Journal*, 27(3), 180–188. <https://doi.org/10.1016/j.ausmj.2019.05.004>
- Wamba, S. F., Akter, S., Edwards, A., Chopin, G., & Gnanzou, D. (2017). Big data analytics and firm performance: Effects of dynamic capabilities. *Journal of Business Research*, 70, 356–365. <https://doi.org/10.1016/j.jbusres.2016.08.009>
- Wedel, M., & Kannan, P. K. (2016). Marketing analytics for data-rich environments. *Journal of Marketing*, 80(6), 97–121. <https://doi.org/10.1509/jm.15.0413>
- Zeng, J., et al. (2021). Ethical considerations of AI in marketing. *Journal of Business Ethics*, 173(4), 753–770. <https://doi.org/10.1007/s10551-020-04512-3>