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Artificial intelligence: Building a research agenda

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ABSTRACT

Objective: The existing literature on artificial intelligence is reviewed with the aim of identifying interesting and novel research avenues. This leads to a focus on experiences, customisation, diversity and strategy as the main issues requiring further investigation.

Research Design & Methods: A systematic literature review was conducted on articles related to artificial intelligence and business using various databases including Scopus, Web of Science and Google Scholar.

Findings: Artificial intelligence is a hot topic particularly for international business managers who are incorporating technological innovation for competitive reasons. This article focuses on the link between artificial intelligence and international business in terms of future research opportunities.

Implications & Recommendations: The results of this study will help business managers and practitioners understand the main trending areas related to artificial intelligence in a business setting. It is recommended that academic researchers and policy makers consider the future research suggestions stated in the article in order to help them derive new research directions.

Contribution & Value Added: Potential research topics and questions are stated that help international business researchers and practitioners focus on key important areas. Thereby helping to consolidate the existing research but also offering new possibilities regarding the use of artificial intelligence in international business.

Article type:	literature review
Keywords:	artificial intelligence; business model innovation; entrepreneurship; globalisation; innovation; international business; internationalisation; societal change; technology innovation
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INTRODUCTION

Exponential technologies such as the internet of things and artificial intelligence have transformed international business (Enholm *et al.*, 2022). The term 'artificial intelligence' is an umbrella term that discusses the whole process for utilising computer aided machine technology in business. It includes the whole digitalisation process for acquiring and assessing data to managing business relationships and enables businesses to create and sustain value for their stakeholders by using computer aided data techniques (Nguyen & Malik, 2022). An artificial intelligence application is defined as "diverse algorithms, systems and devices that have capabilities for gaining insights, learning from data, and making informed decisions" (Dorotic *et al.*, 2023, p. 2). Globally people can expect major changes to their daily activity as a result of artificial intelligence applications (Kulkov, 2021). Increasingly artificial intelligence technologies such as virtual assistants are used with artificial intelligence algorithms underpinning mobile commerce. This means there are a plethora of ways artificial intelligence can be used with governments relying on it as a form of surveillance and monitoring activity with public services such as educational institutions using it. Increasingly electronic-government services such as healthcare (Noorbakhsh-Sabet *et al.*, 2019) and transport are

based on artificial intelligence. Smart cities that enable people to electronically pay for and use services harness artificial intelligence technologies.

Generative artificial intelligence is "a type of artificial intelligence (AI) that can generate text, images, audio, code, videos and synthetic data" (Kanbach *et al.*, 2023, p. 2). It is becoming popular due to its simplicity in useability to generate content, which has implications for companies in terms of how they develop their business model (Loureiro *et al.*, 2021). Some functions of a business such as interaction with customers are being more affected by generative artificial intelligence. This has meant more automisation of administrative tasks. Generative artificial intelligence is a groundbreaking technology that is forcing businesses and governments to alter their business model particularly through the creation of smart cities (Herath & Mittal, 2022). Thereby providing the impetus for internal change but also a restructure in external relationships. In the swiftly evolving global business environment companies need to utilise generative artificial intelligence particularly through integrating human knowledge into artificial intelligence to stay competitive (Johnson *et al.*, 2022).

Empirical evidence about international business evaluations of artificial intelligence technology is limited with scarce research available regarding international differences (Mariani *et al.*, 2023). We know little about how different countries utilise artificial intelligence through public and private partnerships particularly through customer relationships (Ledro *et al.*, 2022). This means we lack clear insights into whether country contexts influence perceptions of artificial intelligence.

In the current business climate, managers cannot ignore artificial intelligence and need to monitor it carefully (Pitt *et al.*, 2023). Artificial intelligence has broadened the mindsets of global managers and influenced new trajectories particularly around digital sustainability initiatives (Pan & Nishant, 2023). The purpose of this article is to review the literature on artificial intelligence with a goal towards obtaining future research suggestions. Key issues are highlighted in order to stress certain research paths.

RESEARCH METHODOLOGY

A systematic literature review was conducted using the key words 'artificial intelligence' and 'business'. Articles, book chapters and books were analysed for their main trending areas related to these topics. The review conducted emphasised new publications published in the last couple of years after the COVID-19 pandemic in order to understand the trajectory of digitalisation practices regarding artificial intelligence. Each contribution was then analysed in terms of how it influenced artificial intelligence research and future research suggestions then identified. The main themes and findings were considered as a way to understand forthcoming projections.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Artificial Intelligence

Stone *et al.* (2020, p. 183) define artificial intelligence as "the use of multiple technologies that enable computers to sense, comprehend, act and learn, including techniques such as machine learning, natural language processing, knowledge representation and computational intelligence". The link between humans and computers in work practices is increasing due to the digital economy emphasising the automation of tasks. Artificial intelligence is used in workplaces for a variety of tasks including identifying target markets, communicating with customers, organising deliveries from suppliers and for competitive strategic reasons (Schneider *et al.*, 2023). Some companies have made greater progress in integrating artificial intelligence into their operations thereby helping them to be technological progressive. Artificial intelligence can be used by humans to delegate tasks such as online fraud detection and online advertising (Vrontis *et al.*, 2022). This means it is utilised as a form of recommendation system in terms of taking into account dynamic knowledge. It can be used in decision making in terms of evaluating candidates for jobs via processes of automation (Wright & Schultz, 2018). In the sport and health areas it is being used for marketing analytics and monitoring purposes.

Artificial intelligence is different from basic computer analytics as it learns from data in terms of doing things better (Wu & Monfort, 2023). Thus, it feeds back improvements in terms of assessing

current practices. It is useful when data is precise and the outcomes can be measured but when data is unclear the use of artificial intelligence might not be so accurate. This is due to data rapidly changing based on time constraints and information being contextually based. The use of artificial intelligence in business is taking place in conjunction with general digital technology advances. Thus, business innovation practices are being computerised but supplemented by artificial intelligence applications such as blockchain technology (Wang *et al.*, 2022). An advantage of artificial intelligence usage over humans is the removal of personal biases from decision making, which can be unintentional based on experiences or intentional due to thought processes (Sestino & De Mauro, 2022). The benefits of using artificial intelligence in business include faster decision-making processes that can free up time for other tasks (Sharma *et al.*, 2022). Businesses can capture better competitive positions when they use artificial intelligence to make rational decisions that remove any form of bias.

Unprecedented changes in digital technologies have compelled businesses to utilise artificial intelligence and is now viewed as more user friendly for businesses and a necessity in the digital business environment. In the 1990's artificial intelligence was defined in a general sense because the internet and related mobile commerce applications were not available. This meant the emphasis was on technology that solved problems as Hayes-Roth (1995, p. 329) defined artificial intelligence as "reasoning to interpret perceptions, to solve problems, (and) draw inferences and determinations". Another definition from the 1990's is Russell and Norvig (1995, p. 31) who stated that it is "anything that can be viewed as perceiving its environment through sensors and acting upon that environment through effectors". In the 2000's artificial intelligence began being defined with reference to emerging technologies such as cloud computing. In the 2020's machine learning, big data and augmented reality are often included in definitions of artificial intelligence.

Artificial intelligence technologies exploit big data in order to help a business in the marketplace. Big data includes information assets that can help a firm make decisions. This involves mining data through sentiment analysis and other techniques. Artificial intelligence systems can identify sentiments from data and identify emotions, which includes analysing non-verbal and facial recognition structures (Mariani & Borghi, 2023). Machine learning is a form of artificial intelligence that involves machines learning from data that helps predict trends. Large language models are used for deep learning because they can communicate in natural languages. This enables them to summarise information in a way humans can understand. ChatGPT and Bard are forms of large language models that are considered generative forms of artificial intelligence. This means they are conversational agents that communicate like humans but through technology (Malthouse & Copulsky, 2023). Artificial intelligence is enabled by different stakeholders in the business environment. Table 1 below states each of these stakeholders in terms of their international business functions.

Table 1. Artificial intelligence ecosystem stakeholders

Stakeholder	International business functions
Consumers	Individuals and entities that interact with artificial intelligence communications through the consumption of products and services. This includes how they view and understand the role of artificial intelligence in the transaction.
Influencers	Third parties such as celebrities or multinationals that influence perceptions about artificial intelligence.
Marketers	Marketing communication including social media, print advertisements and word of mouth regarding artificial intelligence.
Technology developers	Artificial intelligence creators that utilise formal and informal innovation to build systems.
Regulators	Governments and policy makers implement laws and policies regarding artificial intelligence.

Source: own study.

International Business and Artificial Intelligence

Emerging technologies such as artificial intelligence and quantum computing are getting more attention in the international business literature. Artificial intelligence and international business are conceptually about how digital technologies are used in a global context. Research on digital technology has focused on innovation and entrepreneurship but more recently artificial intelligence. New areas of research involve specific forms of artificial intelligence such as machine learning, the metaverse, virtual reality, augmented reality and conversational agents. This has led to a rapid increase in research around the use of artificial intelligence in international business (Ciulli & Kolk, 2023). The international business discipline area is well established in the literature and in practice. It has been prolific in identifying new areas of research such as international entrepreneurship, business model innovation and the circular economy thereby consistently exploring new research topics.

Internationalisation or globalisation has long been a key area of interest for international business managers. Govindarajan and Gupta (2001, p. 4) define globalisation as "a growing economic interdependence among countries, as reflected in the increased cross-border flow of three types of entities: goods and services, capital, and know-how". It has enabled them to increase their performance by opening up their business to new customers. Leung *et al.* (2005, p. 358) states "traditional IB research has been concerned with economic/legal issues and organizational forms and structures". The transition of countries such as China and India to global powerhouses has shifted the economic power and made international business research focus on emerging technologies such as artificial intelligence. Regional integration through the European Union and Association of South East Asian Nations has further stressed internationalisation and the reliance on new technology.

Internationalisation is now assumed in business transactions due to the relative ease at which products and services can be sold globally. The COVID-19 pandemic did somewhat change the process of internationalisation as country borders closed and global mobility was restricted. However, coinciding with the COVID-19 pandemic was the increased digitalization of services that increased global opportunities. This meant the digital economy based on artificial intelligence changes and new platform companies such as Amazon has increased. Universally people regardless of geographic or monetary position can obtain many digital services. This has led to a form of cultural convergence in terms of accessing digital technology. Artificial intelligence is a modern form of digital technology that is further internationalising business and offers benefits to companies in detecting and diagnosing issues that might otherwise be overlooked. This helps in decision making processes and provides a sense of objectiveness (Li *et al.*, 2023). However, the quality of the decisions might be dependent on the available data and power of the technology. This can lead to some debate about data driven decisions made from the use of artificial intelligence. Moreover, the use of artificial intelligence can result in moral and ethical dilemmas (Haenlein *et al.*, 2022). This is caused by the artificial intelligence not having unique competences or context specific data.

Barriers to Usage of Artificial Intelligence

The main barriers to usage of artificial intelligence are customer, marketing, technical, socio-cultural, organizational, financial, operational (Kamoonpuri & Sengar, 2023). Customer related barriers include a reluctance to engage in new technologies causing inertia, which can lead to psychological discomfort in using artificial intelligence due to a fear or loss of control (Gera & Kumar, 2023). Customers might also have physical discomfort in terms of interacting with the technology that can lead to other negative perceptions caused by technology anxiety such as privacy and trust (Haenlein & Kaplan, 2019). Increasingly socio-demographic factors such as age and living conditions can then cause feelings surrounding a loss of human interaction. Marketing barriers normally refer to a lack of communication regarding how to use the artificial intelligence, which can include a lack of adequate promotional activities around the value of the artificial intelligence (Ding & Goldfarb, 2023). Improper framing means that it can be confusing for users to understand why the artificial intelligence is important. In order to reduce marketing barriers the consumer's adoption behaviour regarding the technology should be taken into account in order to tailor the marketing promotion to the technology (Davenport & Ronanki, 2018).

Technical barriers to using artificial intelligence include not having the right training or support to use the technology. This can lead to misinterpretation about the way the technology is used and required support systems. As a consequence, it can take time to adjust to new technology. Linked to technology barriers are socio-cultural barriers, which refer to a unwillingness to engage with non-humans on tasks. Ethical and privacy concerns surrounding artificial intelligence mean that some people fear new technology and can be referred to as laggards (Ashok *et al.*, 2022). This can lead to negative perceptions about the artificial intelligence and result in organizational barriers to integrating the technology in a real world setting (Di Vaio *et al.*, 2020).

Organizational barriers can refer to firm-specific challenges such as having an inappropriate context to introduce artificial intelligence (Chen *et al.*, 2022). Having a lack of managerial support for artificial intelligence may lead to inadequate commitment from top managers. The managers may fear malfunctioning of artificial intelligence that can lead to brand damage and loss of reputation in the marketplace. As a consequence, managers will want to ensure employees are proficient at using artificial intelligence. Issues such as data privacy and security are also important. Financial barriers include high costs of doing business such as setting up factories and distribution centres as well as maintaining them (Abioye *et al.*, 2021). Operational barriers involve difficulties regarding implementation of process systems involving artificial intelligence needed by regulators. This can include political and legal uncertainties as well as customer needs.

DISCUSSION

Agenda for Future Research

Having discussed the definition and conceptualisation of artificial intelligence in international business, an agenda for future research is now presented. Table 2 summarises each of the main research avenues and provides future research focuses and research questions.

Experiences

Artificial intelligence can offer new experiences and enable different ways of thinking about international business particularly around the use of innovation (Bahoo et *al*., 2023). Virtual international experiences can be created to facilitate interaction between business trading partners. For example, the metaverse that enables virtual experiences to be experienced can facilitate international business experiences. When business partners feel and experience the metaverse they may be able to make better decisions. This decreases the risk and likeliness of failure. Researchers should explore how international business companies can improve the trading experience in order to obtain more realistic outcomes. This can lead to improved levels of international engagement and better performance outcomes. Researchers should seek to understand how virtual experiences can lead to real life interactions rather than simply experiences. Virtual experiences can be used to trial different products or services in order to improve international engagement. Physical international experiences can be costly and time dependent so virtual international experiences offer benefits. There are opportunities for researchers to leverage virtual experiences in supply chain management and negotiation tasks.

Customisation

International business managers should use artificial intelligence to customize offerings for stakeholders including customers and suppliers. Future research should look into how predictive analytics can forecast demand by certain customers. For example, some customers might not know what future needs they have but artificial intelligence can predict them. Alternatively, artificial intelligence can customize the needs of international business partners such as their preferences regarding quantity. This can lead to new kinds of international relationships and a more customer centric approach.

Table 2. Future research opportunities

Need in research	Future research focus	Research questions
Need to consider the international business artificial intelligence experience. Businesses should incorporate artificial intelligence into their production and distribution network. Different types of artificial intelligence such as virtual reality should be utilised in international business experiences.	Experiences	What type of international business experiences can utilise artificial intelligence (ie. direct and indirect interactions, marketing communications)? How should international businesses utilise artificial intelligence experiences in the negotiation stage? How can international business utilise artificial intelligence to increase their interactions with potential customers?
International businesses should customise their artificial intelligence offerings based on industry and geographical needs.	Customisation	What kind of artificial intelligence customisation can be used by international businesses? What environmental factors influence levels of artificial intelligence customisation? Can international businesses use artificial intelligence to predict future customisation trends? How should international businesses utilise the metaverse and augmented reality?
International businesses should harness the diverse usages of artificial intelligence. There are numerous advantages and disadvantages of artificial intelligence.	Diversity	How should international businesses consider artificial intelligence from a diversity perspective? How can international businesses weigh up positives and negatives of artificial intelligence usage?
What kind of international business strategies can artificial intelligence be used for? What strategic planning do international businesses need to do regarding artificial intelligence?	Strategy	In the short, medium and long term what kind of artificial intelligence strategies are needed? How can international businesses strategize the use of artificial intelligence?

Source: own study.

Diversity

International business companies should be encouraged to take a diverse approach to artificial intelligence, in terms of thinking holistically about its usages. For example, businesses can adopt artificial intelligence quickly or slowly depending on their financial resources and needs but should be considerate of alternative routes. Diversity can refer to numerous ways artificial intelligence is considered as a resource in a firm context. This can include relationships with other firms and interactions with regulatory authorities. Firms should use artificial intelligence such as the metaverse to create more opportunities for international business. Since developing good business partnerships can take some time, the metaverse offers a new way for firms to communicate. Researchers should explore how firms can utilise the metaverse as a replacement or addition to real time communication. This can make international business more accessible to firms and decrease lead times. By addressing the diversity aspect of artificial intelligence, firms in the international market can better strategize and succeed.

Strategy

Artificial intelligence can help predict changes in the international market thereby enabling improvements in strategic planning. Businesses may change the location of their factories due to the increased usage of robotic technology and less reliance on human labour (Budhwar *et al.*, 2022). Currently many factories are strategically located in areas with low labour rates. As more automation in factories is used there will be less reliance on human capital. Thus, businesses can change their business models based on data predictions. An interesting area for future research is to analyse changes in international market strategies based on artificial intelligence usage. This can include researching whether artificial intelligence driven algorithms can influence geographic location of production facilities. As artificial

intelligence becomes more advanced future research could also look into whether predictive analysis can forecast changes in politics in a country. Research should examine how to use artificial intelligence insights with human intuition about country political changes.

Artificial intelligence in the form of machine learning can help predict price, promotion and produce changes based on alternations in consumer behaviour (Canhoto & Clear, 2020). Future research should examine how artificial intelligence can predict change and resource allocations. Currently much price data is based on forecasts but if more real time information is available then businesses can better personalise their offerings. Businesses might also be able to be more efficient with their usage of resources by focusing on new market strategies such as customer and supplier awareness of their offerings. As more artificial intelligence is incorporated into the value chain of a business, businesses need to manage the trade-off between using technology versus people. This means they will need to invest more into customer concerns relating to emotions and behaviour. Potential research questions can relate to whether there are different opinions based on country settings related to data privacy and ethics.

Preferences for the use and intensity of artificial intelligence related services should be studied in more depth. This can include issues around job design and interaction with technology innovation. Suggestions based on geographic location are more likely to elicit different responses to artificial intelligence. Thus, more qualitative research in the form of in-depth interviews, observation and case studies are required to understand artificial intelligence usage in different country settings.

CONCLUSIONS

Artificial intelligence is one of the hottest topics at the moment that will certainly change international business practices. It has both positive and negative effects depending on its contribution to the global business environment. This article has shown how artificial intelligence shapes international business practices and evolved in the current economic climate. This can shed light on existing artificial intelligence practices and help guide management change.

REFERENCES

Abioye, S.O., Oyedele, L.O., Akanbi, L., Ajayi, A., Delgado, J.M.D., Bilal, M., & Ahmed, A. (2021). Artificial intelligence in the construction industry: A review of present status, opportunities and future challenges. *Journal of Building Engineering*, *44*, 103299. https://doi.org/10.1016/j.jobe.2021.103299

Ashok, M., Madan, R., Joha, A., & Sivarajah, U. (2022). Ethical framework for Artificial Intelligence and Digital technologies. *International Journal of Information Management*, *62*, 102433. https://doi.org/10.1016/j.ijinfomgt.2021.102433

Bahoo, S., Cucculelli, M., & Qamar, D. (2023). Artificial intelligence and corporate innovation: A review and research agenda. *Technological Forecasting and Social Change*, *188*, 122264. https://doi.org/10.1016/j.techfore.2022.122264

Budhwar, P., Malik, A., De Silva, M.T., & Thevisuthan, P. (2022). Artificial intelligence–challenges and opportunities for international HRM: a review and research agenda. *The International Journal of Human Resource Management*, *33*(6), 1065-1097. https://doi.org/10.1080/09585192.2022.2035161

Canhoto, A.I., & Clear, F. (2020). Artificial intelligence and machine learning as business tools: A framework for diagnosing value destruction potential. *Business Horizons*, *63*(2), 183-193. https://doi.org/10.1016/j.bushor.2019.11.003

Chen, L., Jiang, M., Jia, F., & Liu, G. (2022). Artificial intelligence adoption in business-to-business marketing: toward a conceptual framework. *Journal of Business & Industrial Marketing*, *37*(5), 1025-1044. https://doi.org/10.1108/jbim-09-2020-0448

Ciulli, F., & Kolk, A. (2023). International Business, digital technologies and sustainable development: Connecting the dots. *Journal of World Business*, *58*(4), 101445. https://doi.org/10.1016/j.jwb.2023.101445

Davenport, T.H., & Ronanki, R. (2018). Artificial Intelligence for the Real World. *Harvard Business Review, 96*(1), 108-116. Retrieved from https://www.bizjournals.com/boston/news/2018/01/09/hbr-artificial-intelligence-for-the-real-world.html on July 1, 2023.

Ding, M.A., & Goldfarb, A. (2023). The economics of artificial intelligence: A marketing perspective. *Artificial Intelligence in Marketing*, *20*, 13-76. https://doi.org/10.7208/chicago /9780226613475.001.0001

Di Vaio, A., Palladino, R., Hassan, R., & Escobar, O. (2020). Artificial intelligence and business models in the sustainable development goals perspective: A systematic literature review. *Journal of Business Research*, *121*, 283-314. https://doi.org/10.1016/j.jbusres.2020.08.019

Dorotic, M., Stagno, E., & Warlop, L. (2023). AI on the street: Context-dependent responses to artificial intelligence. *International Journal of Research in Marketing*, In Press. https://doi.org/10.1016/j.ijresmar.2023.08.010

Enholm, I.M., Papagiannidis, E., Mikalef, P., & Krogstie, J. (2022). Artificial intelligence and business value: A literature review. *Information Systems Frontiers*, *24*(5), 1709-1734. https://doi.org/10.1007/s10796-021-10186-w

Gera, R., & Kumar, A. (2023). Artificial Intelligence In Consumer Behaviour: A Systematic Literature Review of Empirical Research Papers Published In Marketing Journals (2000-2021). *Academy of Marketing Studies Journal*, *27*(S1).

Govindarajan, V., & Gupta, A.K. (2001). Building an effective global business team. *MIT Sloan Management Review*, *42*(4), 63.

Haenlein, M., & Kaplan, A. (2019). A Brief History of Artificial Intelligence: On the Past, Present, and Future of Artificial Intelligence. *California Management Review, 61*(4), 5-14. https://doi.org/10.1177/0008125619864925

Haenlein, M., Huang, M.H., & Kaplan, A. (2022). Guest editorial: Business ethics in the era of artificial intelligence. *Journal of Business Ethics*, *178*(4), 867-869. https://doi.org/10.1007/s10551-022-05060-x

Hayes-Roth, B. (1995). An architecture for adaptive intelligent systems. *Artificial Intelligence*, *72*(1-2), 329-365. https://doi.org/10.1016/0004-3702(94)00004-K

Herath, H.M.K.K.M.B., & Mittal, M. (2022). Adoption of artificial intelligence in smart cities: A comprehensive review. *International Journal of Information Management Data Insights*, *2*(1), 100076. https://doi.org/10.1016/j.jjimei.2022.100076

Johnson, M., Albizri, A., Harfouche, A., & Fosso-Wamba, S. (2022). Integrating human knowledge into artificial intelligence for complex and ill-structured problems: Informed artificial intelligence. *International Journal of Information Management*, *64*, 102479. https://doi.org/10.1016/j.ijinfomgt.2022.102479

Kamoonpuri, S.Z., & Sengar, A. (2023). Hi, May AI help you? An analysis of the barriers impeding the implementation and use of artificial intelligence-enabled virtual assistants in retail. *Journal of Retailing and Consumer Services*, *72*, 103258. https://doi.org/10.1016/j.jretconser.2023.103258

Kanbach, D.K., Heiduk, L., Blueher, G., Schreiter, M., & Lahmann, A. (2023). The GenAI is out of the bottle: generative artificial intelligence from a business model innovation perspective. *Review of Managerial Science*, 1-32. https://doi.org/10.1007/s11846-023-00696-z

Kulkov, I. (2021). The role of artificial intelligence in business transformation: A case of pharmaceutical companies. *Technology in Society*, *66*, 101629. https://doi.org/10.1016/j.techsoc.2021.101629

Ledro, C., Nosella, A., & Vinelli, A. (2022). Artificial intelligence in customer relationship management: literature review and future research directions. *Journal of Business & Industrial Marketing*, *37*(13), 48-63. https://doi.org/10.1108/JBIM-07-2021-0332

Leung, K., Bhagat, R.S., Buchan, N.R., Erez, M., & Gibson, C.B. (2005). Culture and international business: Recent advances and their implications for future research. *Journal of International Business Studies*, *36*, 357-378.

Li, S., Peluso, A.M., & Duan, J. (2023). Why do we prefer humans to artificial intelligence in telemarketing? A mind perception explanation. *Journal of Retailing and Consumer Services*, *70*, 103139. https://doi.org/10.1016/j.jretconser.2022.103139

Loureiro, S.M.C., Guerreiro, J., & Tussyadiah, I. (2021). Artificial intelligence in business: State of the art and future research agenda. *Journal of Business Research*, *129*, 911-926. https://doi.org/10.1016/j.jbusres.2020.11.001

Malthouse, E., & Copulsky, J. (2023). Artificial intelligence ecosystems for marketing communications, *International Journal of Advertising*, *42*(1), 128-140. https://doi.org/10.1080/02650487.2022.2122249

Mariani, M., & Borghi, M. (2023). Artificial intelligence in service industries: customers' assessment of service production and resilient service operations. *International Journal of Production Research,* https://doi.org/10.1080/00207543.2022.2160027

Mariani, M.M., Hashemi, N., & Wirtz, J. (2023). Artificial intelligence empowered conversational agents: A systematic literature review and research agenda. *Journal of Business Research*, *161*, 113838. https://doi.org/10.1016/j.jbusres.2023.113838

Nguyen, T.M., & Malik, A. (2022). Impact of knowledge sharing on employees' service quality: the moderating role of artificial intelligence. *International Marketing Review*, *39*(3), 482-508. https://doi.org/10.1108/IMR-02-2021-0078

Noorbakhsh-Sabet, N., Zand, R., Zhang, Y., & Abedi, V. (2019). Artificial intelligence transforms the future of health care. *The American Journal of Medicine*, *132*(7), 795-801. https://doi.org/10.1016/j.amjmed.2019.01.017

Pan, S.L., & Nishant, R. (2023). Artificial intelligence for digital sustainability: An insight into domain-specific research and future directions. *International Journal of Information Management*, *72*, 102668. https://doi.org/10.1016/j.ijinfomgt.2023.102668

Pitt, C., Paschen, J., Kietzmann, J., Pitt, L.F., & Pala, E. (2023). Artificial intelligence, marketing, and the history of technology: Kranzberg's laws as a conceptual lens. *Australasian Marketing Journal*, *31*(1), 81-89. https://doi.org/10.1177/18393349211044175

Russell, S., & Norvig, P. (1995). A modern, agent-oriented approach to introductory artificial intelligence. *Acm Sigart Bulletin*, *6*(2), 24-26.

Schneider, J., Abraham, R., Meske, C., & Vom Brocke, J. (2023). Artificial intelligence governance for businesses. *Information Systems Management*, *40*(3), 229-249. https://doi.org/10.1080/10580530.2022.2085825

Sestino, A., & De Mauro, A. (2022). Leveraging artificial intelligence in business: Implications, applications and methods. *Technology Analysis & Strategic Management*, *34*(1), 16-29. https://doi.org/10.1080/09537325.2021.1883583

Sharma, R., Shishodia, A., Gunasekaran, A., Min, H., & Munim, Z.H. (2022). The role of artificial intelligence in supply chain management: mapping the territory. *International Journal of Production Research*, *60*(24), 7527-7550. https://doi.org/10.1080/00207543.2022.2029611

Stone, M., Aravopoulou, E., Ekinci, Y., Evans, G., Hobbs, M., Labib, A., ... & Machtynger, L. (2020). Artificial intelligence (AI) in strategic marketing decision-making: a research agenda. *The Bottom Line*, *33*(2), 183-200. https://doi.org/10.1108/BL-03-2020-0022

Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. *The International Journal of Human Resource Management*, *33*(6), 1237-1266. https://doi.org/10.1080/09585192.2020.1871398

Wang, Z., Li, M., Lu, J., & Cheng, X. (2022). Business Innovation based on artificial intelligence and Blockchain technology. *Information Processing & Management*, *59*(1), 102759. https://doi.org/10.1016/j.ipm.2021.102759

Wright, S.A., & Schultz, A.E. (2018). The rising tide of artificial intelligence and business automation: Developing an ethical framework. *Business Horizons*, *61*(6), 823-832. https://doi.org/10.1016/j.bushor.2018.07.001

Wu, C.W., & Monfort, A. (2023). Role of artificial intelligence in marketing strategies and performance. *Psychology & Marketing*, *40*(3), 484-496. https://doi.org/10.1002/mar.21737

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Conflict of Interest

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