

THE IMPACT OF ARTIFICIAL INTELLIGENCE ON GLOBAL BUSINESS PRACTICES

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Abstract: This article highlights how artificial intelligence (AI) is transforming international business models by altering traditional business practices. With AI's assistance, global businesses can more easily grasp market trends, thereby enhancing operational efficiency and productivity.

AI has revolutionized the efficiency of decision-making processes by reducing time, improving operational efficiency and reducing errors. It has optimized supply chain management by providing new AI-driven insights. Thanks to new technologies such as big data and the Internet of Things (IoT), companies can analyze market trends and improve their global competitiveness. However, AI may present risks in terms of ethical concerns and errors that could impact data security. It has become the responsibility of every employee and manager to improve their digital skills and knowledge about AI in order to remain competitive in their field of work. This research aims to understand the main challenges and opportunities that global businesses are facing due to the expansion of AI in the global economy, and how this is reshaping business models. Strategic adoption of AI can considerably foster innovation and bring huge competitive advantages. Companies and organizations should cooperate with AI researchers to innovate and expand safely. The future belongs to AI, and companies that master it will be more sustainable and resilient in a competitive global market.

Keywords: AI, global business, efficiency, competitiveness, challenges, opportunities.

JEL Classification: O33, M15, F23, M21, L86

Artificial Intelligence (AI) is becoming the shaper and reshaper of international business (IB) strategies, practices, and global environments (Menziez et al., 2024). With operational efficiency, innovation, and decision-making as primary thrusts, AI makes it possible for multinational enterprises (MNEs) to run complex and increasingly digitalized conditions. AI spans a multitude of technologies-including machine learning, natural language processing (NLP), robotics, and neural networks-that can assist organizations in automating tasks to analyze and process huge data volumes to make strategic decisions. In addition to carrying organizational improvements, AI enables firms to foster multinational collaboration through communication, supply chain improvement, and firm product and service adaptation to various cultural, linguistic, and regulatory contexts. Despite that, AI international business faces many challenges, including ethical issues, risks concerning personal data privacy, workforce adaptation problems, and the

imperative for effective governance and compliance structures. In the methodology, the selection and analysis of relevant articles, industry AI reports, and policy papers that address issues in international business—from AI openness and human resource management to digital technologies and B2B marketing—were done in a systematic manner. These sources were then subjected to critical analysis to trace recurring themes, benefits, challenges, and knowledge gaps in the adoption of AI in international business practices.

According to a study of McKinsey Global Institute, (“The State of AI”, 2025) in a survey (The survey question asked, “In which business functions has your organization adopted AI (for example, machine learning, computer vision, natural-language processing)?), 78 percent of respondents say their organizations use AI in at least one business function, up from 72 percent in early 2024 and 55 percent a year earlier. The most frequent use of the technology has been reported in the functions of IT and marketing and sales, followed by service operations. The business function under the scrutiny of the rapid rise in AI use in the past six months is IT, where the share of respondents reporting AI use jumped from 27 percent to 36 percent. There are also more functions in which organizations are reporting AI usage compared to the previous State of AI survey. For the first time, more of the survey respondents are reporting AI use in more than one business function. Overall responses indicate that organizations are using AI in an average of three business functions—up from early 2024 but still a minority of functions.

Organizations that use AI in at least 1 business function, % respondents

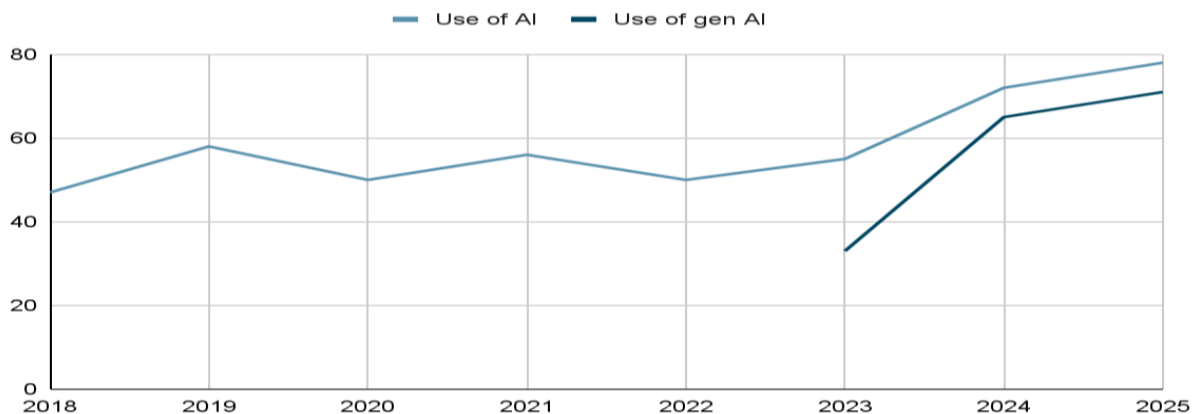


Figure 1. Organisations that use AI in at least 1 business function, in %

Source: Elaborated by authors, based on the report “The state of AI”, 2025

The uses of AI in marketing and sales will be the most common across organizations in all sectors, whereas the deployment in other functions varies greatly by industry. Organizations apply the technology to generate maximum value—for instance, service operations for media and telco companies, software engineering for tech companies, or knowledge management for professional services ones. Gen AI deployment varies also by company size. Responses show that organizations with more than half a billion dollars of annual revenue are using gen AI across a broader scope of their organizations than smaller companies. Gen AI is most widely applied in marketing and sales, product and service development, service operations, and software engineering, as shown by survey responses.

Amazon case study: implementing AI within business operations

It demonstrates that AI adoption in the business operations of such a multinational giant as Amazon has a lot to offer in terms of benefits and challenges. These benefits include the promise of more efficient operation, reduced costs, and improved experiences for customers, such as using technologies like natural language processing (NLP) for the customer service team, machine learning (ML) for supply chain optimization, as well as computer vision for quality control. Integration of AI, however, poses challenges, including but not limited to job displacement, ethical

implications, and data privacy issues, which would need to be addressed through proper planning and strategy.

For many years now, AI has been part of the business model of Amazon, (Etukudo, Emem., 2023) that automates more repetitive jobs within the firm, engages in advanced data analytics for a better decision-making process among stakeholders, and enhances supply chain management processes for customer service and marketing operations. Among considerations for any organization intending to adopt AI are the reasons for adopting AI, the appropriate technology for deployment, measurement standards for benefit realization, identification of scope of impact areas of AI, influence on employees, ethical concerns to be discussed, and practical recommendations for peer companies. With strategic alignment focused on risk management while rolling out AI technologies, companies can replicate the increased competitiveness and innovation that Amazon gained from its adoption of AI across global markets.

Advanced digital technologies in international business

Although among other digital technologies, AI, is implicated in international business, other technologies include blockchain, Internet of Things (IoT), 3D printing, and simulation (Alan A. et al, 2023). The blockchain supports greater transparency and trust through secure and immutable ledgers, reducing monitoring costs and providing reliable transaction support in the international arena. IoT-based data collection and analytics are real-time invisible optimization of supply chains and better responsiveness in meeting market demand. 3D printing encourages local manufacturing, which reduces transportation costs and makes it easy to become established in foreign markets. Untapped simulation technologies have great promise for future applications in scenario analyses and strategic decision-making. However, these technologies in the literature seem to be rather developing and unformed. Thus, this area needs intense interdisciplinary research to understand better such technologies in global value chains, inter-firm and intra-firm relationships, and cybersecurity.

Global AI infrastructure and risk management

Such international deployments depend more on global cloud infrastructure for the international exchange of reliable data sources and AI services than on establishing complete domestic capabilities (OECD, 2025). Countries with developed cloud infrastructures are major venues for AI model hosting and distribution toward international expansion. However, there are apparent risks with international deployment of AI, such as system failure, cybersecurity vulnerability, and regulatory compliance issues. Risk assessment processes help analyze both the possible advantages and possible evils that can result from relating to AI in organizations. It is also equally critical to note that the effects of risk phenomena such as "boiling frog" (Mohsen Soori, et. all, 2023) in organizations, which leads organizations to carry increasing risks as concession benchmarks become lax, make continuous monitoring the apparent gold standard to save organizations from financial losses, reputational damage, and legal complexities.

AI in human resource management

AI applications in human resource management to improve employees' experiences by automating mundane tasks, providing hyper-personalized talent management solutions, and assisting in performance evaluations (Menzies et al., 2024). Employee satisfaction, engagement, and commitment improve, while the organization benefits from increased efficiency and productivity. However, concerns remain: job insecurity, stress, and resistance to this technology. Developing fusion skills (soft skills, judgment, and innovation) (Budhwar et al., 2022) and AI literacy (understanding algorithmic systems) are essential for employees to effectively partner with AI. Sometimes, ethical issues, data privacy, and mitigating bias become equally important, especially in an early AI application that has shown gender and race biases in recruitment and promotion decisions. Compliance with regulations, such as GDPR, becomes a real challenge for multinationals, especially when operating across multiple jurisdictions.

AI in supply chain and B2B Marketing

Supply chain management is optimized by ANNs (Artificial Neuronal Networks) and analytics powered by AI to enhance forecasting accuracies and improve route planning, inventory management, and demand forecasting (Surajit Bag, et. All, 2021). The incorporation of customer e-sentiments from large unstructured datasets enhances the overall intelligence and decision-making. In B2B Marketing, AI aids in knowledge generation from structured and unstructured data (e.g., social media and search engines) and supports rational decision-making under uncertainty, thus stimulating innovation outside traditional marketing models. AI gives foresight and automates processes, thereby enabling companies to react to fast-evolving international markets, adjust strategies to accommodate sustainability and efficiency trends, and improve their overall performance.

AI openness, transparency, governance and economic impact

Open-weight AI models create innovation, competition, and access to advanced technologies for smaller firms and emerging markets. Such cases provide the best localization possible for products and services-with respect to cultural, linguistic, and regulatory contexts (Mohsen Soori, et. all, 2023) . However, openness brings with it risks of intellectual property, cybersecurity, and misuse. All stakeholder organizations and policymakers need to combat the need for protection from transparency by creating governance frameworks that promote responsible deployment of AI while protecting proprietary assets, privacy, and operational safety. Open weight models help businesses to be innovative and competitive, because they lower barriers to entry. Especially is important for startups, because they have access to develop their own models.

By this, companies can adapt, access their own models of AI. According to OECD analysis, (AI Openness: Balancing Innovation, Transparency and Risk in Open-weight Models - OECD.AI, n.d.) USA and China are leaders in developing open-weight models. Among the actors involved in the undertaking are primarily the United States, China, and France, emphasizing what could be termed a global race as well as a national strategy of technological sovereignty and global influence. Besides, the open-weight models are becoming more numerous but also generally better. As per conclusion, it emphasize the proper chance for businesses to grow, expand with the help of AI, which help in the decision-process making and other

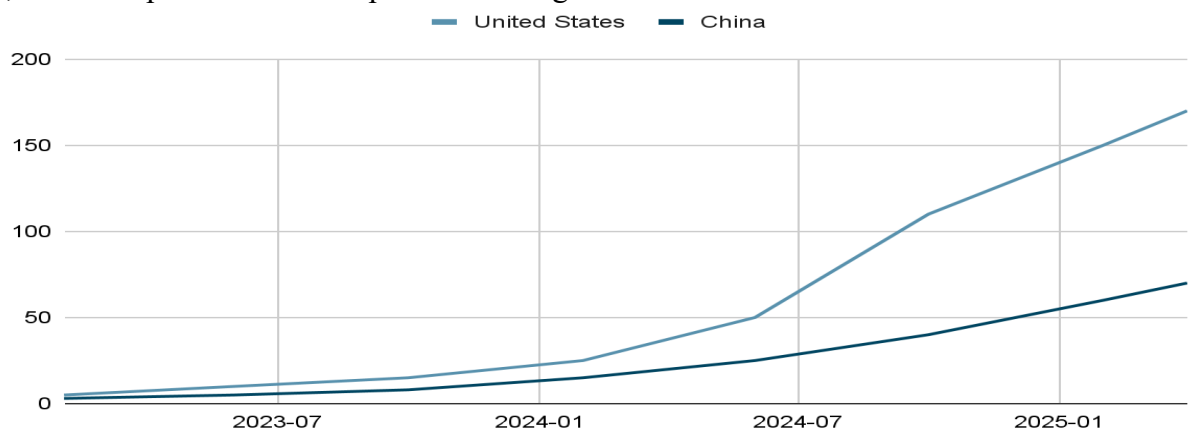


Figure 2. Open-weight models

Source: Elaborated by authors, based on the OECD report

Penetration of AI (Quiroz-Vázquez, C.,et. all, 2025) within all organizational functions-such as marketing, sales, IT, and cybersecurity-brings about tremendous economic and strategic advantages. Institutional capabilities, like sound data governance, hybrid or multicloud infrastructure at scale, and mapping AI efficiencies against the core business objectives, will have to be built up by firms. Ethics and risks management, along with security, will remain very

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important, for AI could harbor bias, lack in transparency, and misuse. Responsible acquisition would gain competitive advantage, trust in stakeholders, and a pathway to sustainability.

Conclusion

AI is believed to be a disruptive force for the international business sector affecting strategy, operations, and value creation across supply chain management, marketing, human resources, and customer engagement. An example of how AI has maximized efficiency, minimized cost, and enhanced customer experiences with modern technological inventions like natural.

Yet, these very challenges-moral considerations on data privacy and the adaptations that the workforce will need to embrace, alongside compliance with regulation-raise serious concerns and warrant immediate attention and intervention. The establishment of open-weight AI models is an important tributary in this respect-by truly democratizing access to the most cutting-edge AI technology, thus allowing companies, including startups from developing markets, to customize these systems to meet local needs. These models encourage innovation, transparency, and collaboration cross-border in as much as they also bear the risks of misuse, disregard for intellectual property rights, and open doors for cybercriminals. The AI integration future might push multinational companies to harmonize innovation with responsible governance to enable AI adoption benefits-increased competitiveness, adaptability, and resilience-to culminate in sustainable growth and ethical conduct in international business.

References:

1. Menzies, J., Sabert, B., Hassan, R., & Mensah, P. K. (2024). Artificial intelligence for international business: Its use, challenges, and suggestions for future research and practice. *Thunderbird International Business Review*, 66(2), 185–200. <https://doi.org/10.1002/tie.22370> [accessed: 13 september 2025]
2. Alan A. Ahi, Noemi Sinkovics, Yelnur Shildibekov, Rudolf R. Sinkovics, Nikolay Mehandjiev, Advanced technologies and international business: A multidisciplinary analysis of the literature, *International Business Review*, Volume 31, Issue 4, 2022, 101967, ISSN 0969-5931, <https://doi.org/10.1016/j.ibusrev.2021.101967>. [accessed: 13 september 2025]
3. AI OPENNESS: A PRIMER FOR POLICYMAKERS. OECD ARTIFICIAL INTELLIGENCE PAPERS August 2025 No. 44. (n.d.). In OECD. https://www.oecd.org/content/dam/oecd/en/publications/reports/2025/08/ai-openness_958d292b/02f73362-en.pdf [accessed: 15 september 2025]
4. Budhwar, P., Malik, A., De Silva, M. T. 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> [accessed: 16 september 2025]
5. Surajit Bag, Shivam Gupta, Ajay Kumar, Uthayasankar Sivarajah, An integrated artificial intelligence framework for knowledge creation and B2B marketing rational decision making for improving firm performance, *Industrial Marketing Management*, Volume 92, 2021, Pages 178-189, ISSN 0019-8501, <https://doi.org/10.1016/j.indmarman.2020.12.001> [accessed: 17 september 2025]
6. AI openness: Balancing innovation, transparency and risk in open-weight models - OECD.AI. (n.d.). <https://oecd.ai/en/wonk/balancing-innovation-transparency-and-risk-in-open-weight-models> [accessed: 17 september 2025]
7. Mohsen Soori, Behrooz Arezoo, Roza Dastres, Artificial neural networks in supply chain management, a review, *Journal of Economy and Technology*, Volume 1, 2023, Pages 179-196, ISSN 2949-9488, <https://doi.org/10.1016/j.ject.2023.11.002> [accessed: 21 september 2025]
8. The state of AI.L How organizations are rewiring to capture value. (2025). In *Quantum Black AI by McKinsey*. https://www.mckinsey.com/~media/mckinsey/business%20functions/quantumblack/our%20insights/the%20state%20of%20ai/2025/the-state-of-ai-how-organizations-are-rewiring-to-capture-value_final.pdf [accessed: 13 september 2025]
9. Quiroz-Vázquez, C., & Goodwin, M. (2025, September 19). Artificial Intelligence Business. *IBM*. <https://www.ibm.com/think/topics/artificial-intelligence-business> [accessed: 22 september 2025]
10. Etukudo, Emem. (2023). AI AND ITS IMPACT ON GLOBAL BUSINESS OPERATIONS: A CASE STUDY OF AMAZON. 10.13140/RG.2.2.19328.65282. [accessed: 23 september 2025]