ITJ | The International Tax Journal

Artificial Intelligence Between Innovation and Risks: Its Pivotal Applications in the Industry, Healthcare, Finance, and Agriculture Sectors

Dr. Atrous Seif Eddine [1]

[1] Laboratory of Sustainable Local Development**,** Department of Economic Sciences, Faculty of Economic, Commercial and Management Sciences, Chadli Bendjedid University – El Tarf, Algeria. Email: atrous-seifeddine@univ-eltarf.dz

Abstract---This article aims to highlight the importance of artificial intelligence (AI) and its role in reshaping vital sectors, by focusing on its pivotal applications in industry, healthcare, finance, and agriculture. The main question addressed in this article revolves around the ability of the four sectors to strike a balance between maximizing the benefits of AI's tremendous innovation and effectively managing its risks and future challenges. The results showed that the four sectors highlighted in this article have benefited from artificial intelligence, The industrial sector witnessed an increase in productivity as a result of the decline in human errors achieved by the automation process. The healthcare sector also benefited from increased efficiency inside operating rooms and improved healthcare. The financial sector also had its share, with complex intelligence applications algorithms providing accurate financial forecasts. Without overlooking the pivotal role played by agricultural robots in increasing agricultural productivity and curbing the escalation of unemployment in rural areas. The study also concluded that the use of artificial intelligence applications poses several risks**,** such as income inequality and illegal uses**,** which necessitate the development of fair economic and social policies, and the enactment of strict laws and the development of protection systems.

Keywords---agricultural robotics, Artificial intelligence, financial forecasting, healthcare technology, industry 4.0.
JEL Classification: O3, O14, I1, G17, Q16

How to Cite:
Eddine, A. S. (2025). Artificial intelligence between innovation and risks: Its pivotal applications in the industry, healthcare, finance, and agriculture sectors. *The International Tax Journal*, *52*(5), 2782–2791. Retrieved from https://internationaltaxjournal.online/index.php/itj/article/view/284

The International tax journal ISSN: 0097-7314 E-ISSN: 3066-2370 © 2025

Submitted: 19 February 2025| Revised: 10 September 2025| Accepted: 07 October 2025

Introduction

Artificial intelligence is one of the most remarkable outcomes of the technological revolution over the past decades, the world has witnessed an unprecedented transformation with the emergence of these modern technologies, which have penetrated nearly every aspect of life, bringing about a radical change in performance and results. Today, the concept of technology is no longer traditional, limited to assisting humans in performing tasks with greater speed and precision, instead it has extended to include thinking, analysis, and decision-making. this technological advancement has blended innovative capabilities with ethical, social, and technical challenges and risks.

This study addresses the following main question: **How can the industry, healthcare, finance, and agriculture sectors benefit from the tremendous innovation of artificial intelligence while effectively managing its increasing risks and challenges?.** To answer the main question, the following hypothesis was formulated: The industry, healthcare, finance, and agriculture sectors can achieve an unprecedented transformation in efficiency, productivity, and innovation through the strategic adoption of artificial intelligence, accompanied by proactive and effective management of the associated ethical, security, operational, and social risks.

The importance of this study lies in addressing the topic of artificial intelligence, which has become a global challenge requiring countries to maximize the benefits and opportunities it offers, while adopting preventive policies to minimize and control its risks. Moreover, this study does not focus on a specific sector but rather provides a comprehensive, multi-sectoral perspective on how artificial intelligence affects various aspects of the economy and society, balancing its opportunities and risks.

This study explores artificial intelligence from two interconnected dimensions: innovation and risk. On the innovation front, it highlights AI's transformative applications across four vital sectors. In industry, the study examines the concept of Industry 4.0 and the role of automation and smart robotics in enhancing productivity. In healthcare, it sheds light on diagnostic support systems and surgical robots that improve accuracy and safety in operating rooms, contributing to the development of intelligent healthcare systems. In the financial sector, the study focuses on the use of machine learning algorithms for predictive analytics and automated financial advising. Meanwhile, in agriculture, artificial intelligence enables precision farming, with agricultural robots automating tasks and monitoring crops to ensure food security and resource sustainability. On the other hand, the study addresses the growing risks accompanying the rapid spread of artificial intelligence technologies, including job displacement due to automation, income inequality driven by skill gaps, cybersecurity threats, privacy violations, and legal and ethical concerns related to accountability. These challenges require proactive strategies and responsible governance to ensure the sustainable and equitable integration of artificial intelligence.

1. Applications of Artificial Intelligence in Industry:

Despite the explosion brought about by artificial intelligence in recent years, its initial emergence dates back to 1956, when a group of experts coined the term "artificial intelligence" for the first time. In the 1980s, focus shifted to symbolic reasoning and expert systems, which played an important role in the medical field. (Padmaja et al., 2024). In 1997, the term "big data" emerged as the result of years of research and studies aimed at developing artificial intelligence technologies. This development allowed for increased capabilities in storage systems and digital information analysis, indicating the ability to store vast amounts of data (Ezin, 2024).

The industrial sector is among the sectors that have witnessed significant development due to the introduction of modern technologies, which led to the automation of processes and the replacement of human labor with robots. This has resulted in an unprecedented industrial revolution. The first use of robots in the industrial field dates back to 1961 by the company General Motors. Since then, the

automotive industry has been a pioneer in integrating robots into the production process (Fondation de l'Académie des Technologies, 2020).

1.1. Industry 4.0:

The term "Industry 4.0" refers to the new industrial revolution that relies on modern technologies to accelerate the production process and make it more specialized.

1.1.1. Industrial Revolutions: A Historical Overview

Industry has witnessed significant developments over successive decades. In the 17th century, industries based on water power, steam, and mechanics emerged, known as Industry 1.0. In the 18th century, the second industrial generation appeared, relying on electricity, production lines, and assembly lines, referred to as Industry 2.0. The 20th century marked a major industrial turning point with the advent of the Third Industrial Revolution (Industry 3.0), which was based on automation, computing, and the emergence of electronic devices and components that triggered a real industrial revolution (Tay et al., 2018).

Today, due to the tremendous advancement of information and communication technologies and the emergence of highly advanced technologies such as cyber-physical systems, the Internet of Things, augmented reality, big data, robotics, cloud computing, cybersecurity, and many other technologies, various applications supporting artificial intelligence have been made possible. The following figure illustrates the various industrial revolutions throughout history.

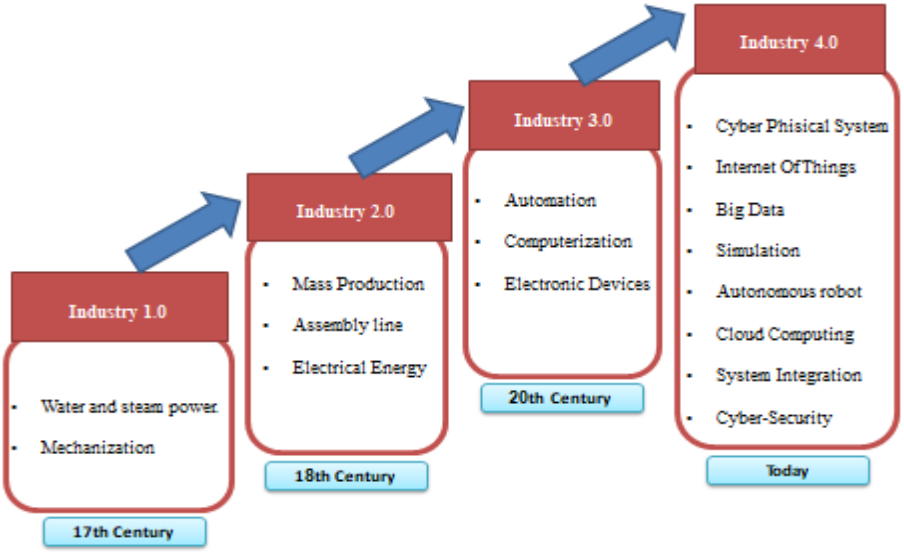

Figure (01): The evolution of industrial revolutions
Source : Adapted from "An Overview of Industry 4.0: Definition, Components, and Government Initiatives," by S. I. Tay, T. C. Lee, A. H. N., & A. N. A. Ahmad, 2018, *Journal of Advanced Research in Dynamical and Control Systems*, 10(14-Special Issue), 1378–1387

Figure 1 shows that the evolution of industry throughout history has closely followed the technological advancements witnessed globally since the 17th century, starting from the discovery of water and steam

power and mechanization, to the emergence of artificial intelligence and various modern technologies that have transformed the world's perspective on different industries.

1.1.2. Definition of Industry 4.0:

Industry 4.0 is defined as the industrial methods that use the latest technologies to facilitate the process of collecting and intelligently interpreting data to make the right decisions (Qin, J., Liu, Y., & Grosvenor, R, 2016).

Industry 4.0 is surrounded by a vast network of advanced technologies; automation, artificial intelligence, robotics, and the Internet of Things all lay the foundation for a new and different era of traditional manufacturing processes (Schumacher, A., Erol, S., & Sihn, W, 2016).

Based on the foregoing, industry 4.0 is the process of moving away from traditional manufacturing methods to more advanced approaches that use sophisticated technologies such as artificial intelligence, which will allow for increased efficiency and timely, sound decision-making.

1.2. Automation and the Transformation of Global Industry:

Since their introduction into industry, robots and automation processes have brought about a significant leap in manufacturing operations. Industrial robots, equipped with advanced sensors and highly precise software, have enabled the execution of repetitive tasks with exceptional accuracy. This has contributed to reducing human errors and increasing productivity. Moreover, the automation of manufacturing processes has ensured the continuous operation of various equipment, helping to minimize downtime and consequently boost production capacity.

In discussing the benefits of automation and robotics in manufacturing, it is important not to overlook the potential risks associated with the coexistence of humans and machines in the same workspace. This highlights the necessity of managing risks related to physical safety and potential accidents, as well as ensuring compliance with safety standards (TRA-C industrie, 2025). The number of industrial robots installed worldwide exceeded 500,000 units in 2023, while the global stock reached 4.3 million units in the same year (International Federation of Robotics [IFR], 2024). The following figure illustrates the geographical distribution of industrial robots in 2023:

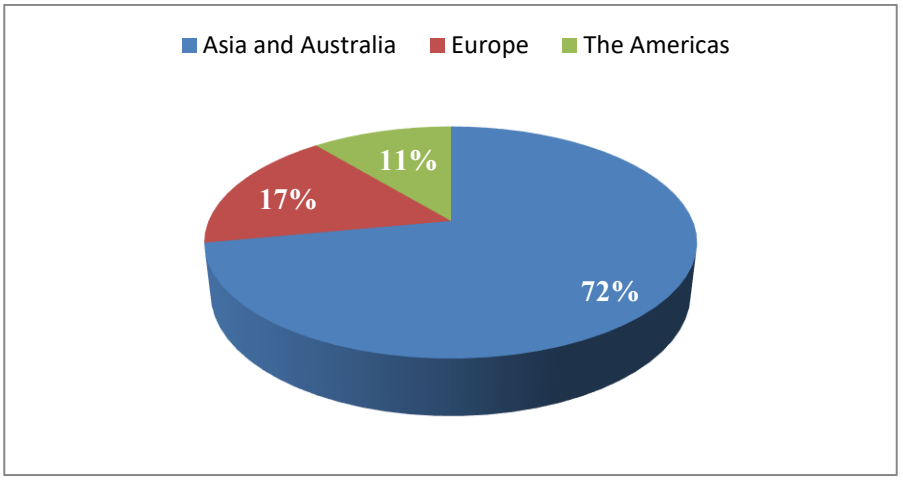

Figure (02): Geographical Distribution of Industrial Robots (2023)
Source : International Federation of Robotics. (2024). World Robotics 2024 [Press conference presentation]. International Federation of Robotics.

Figure 02 above shows that the continents of Asia and Australia accounted for 72% of the total number of industrial robots installed worldwide in 2023, while Europe ranked second with 17%, followed by

North and South America with a combined share of 11%. What stands out in these figures is the significant gap between the leading region -Asia- due to the presence of major industrialized countries such as China, Japan, Thailand, and other emerging Asian economies.

2. Artificial Intelligence in Healthcare:

The healthcare sector is among the industries that have benefited significantly from the advancements brought by artificial intelligence (AI) applications. Over the past decades, this sector has taken advantage of modern technologies that have greatly contributed to improving patient care—both in terms of diagnostics and administrative performance. The role of AI in healthcare has become increasingly prominent, as the algorithms powering these applications enhance diagnostic accuracy and enable precise identification of appropriate treatments. Additionally, they allow for continuous monitoring of patients' health conditions and improve performance in operating rooms. All of this ultimately leads to better health outcomes and more efficient and effective care delivery.

Like many other sectors, the healthcare industry has benefited from various artificial intelligence applications that, in addition to accelerating processes and enhancing precision, have significantly improved the speed and accuracy of performance. The following sections will present the most important of these applications.

2.1. Diagnostic Assistance:

The analysis of medical imaging data, genetic information, and biosensor outputs is among the technologies that help improve diagnostic accuracy and efficiency. These technologies have outperformed doctors in the early detection of tumors and psychological disorders, as well as in predicting genetic diseases through the analysis of genetic markers as a preventive measure (Udegbe et al., 2024).

2.2. Surgical Assistant Robots:

The role of artificial intelligence (AI) in healthcare has not been limited to disease diagnosis; it has also extended into operating rooms. AI-powered surgical devices supported by robotics have helped surgeons perform highly precise procedures without the need for large incisions, a technique known as minimally invasive surgery. This advancement has contributed to reducing the risk of infections and accelerating patient recovery. Despite their major role in enhancing precision and efficiency, AI applications have not replaced human surgeons. Instead, they have strengthened surgical capabilities through web-connected prosthetic tools that, for example, allow a surgeon in the United States to perform surgery on a patient in Germany without being physically present (Quazi, Saha, & Singh, 2022).

2.3. Monitoring and Healthcare:

Remote monitoring systems enhanced by artificial intelligence help track and care for patients by continuously collecting health data such as heart rate, blood pressure, and blood sugar levels. This allows for real-time monitoring of patients' conditions, enabling the analysis of this data at a later stage and the sending of alert notifications when any irregularities are detected. Such systems allow for early detection of health issues and enable timely medical intervention when needed (Udegbe et al., 2024).

2.4. Virtual Nursing Assistant:

Virtual nursing assistance services have enabled hospital patients to receive necessary healthcare and rehabilitation interactively through tablets or television screens.
Patients often feel more comfortable asking questions to a non-human assistant. This technology relies on artificial intelligence algorithms and cloud computing, using electronic health records while also being able to analyze patients' responsiveness, engagement levels, and adherence to care plans (Quazi et al., 2022).

3. Artificial Intelligence in Finance:

Financial markets have experienced significant advancements due to the application of artificial intelligence. The financial services sector has made a qualitative leap from simple traditional computing models to more advanced techniques based on neural networks and deep learning. This advancement has enabled highly accurate financial decision-making by processing massive amounts of data with unparalleled precision and within the required time frame. These methods have helped revise the theoretical foundations of financial services, leading to the emergence of new frameworks for market analysis, risk management, and enhancing customer relations.

3.1. Machine Learning Algorithms:

Machine learning algorithms form one of the fundamental pillars of artificial intelligence systems used in the financial sector, due to the ease they provide financial institutions in data analysis and the speed and accuracy in decision-making. Initially, these algorithms were simple statistical models, but with rapid development, they have evolved into advanced learning architectures with tremendous capability to process financial data (Viswanathan, 2025).

One of the key features offered by machine learning algorithms in predicting loan repayment delays is the use of boosted regression models and reliance on credit card data. It is also possible to predict corporate bankruptcy through financial data and market information to manage credit risks. Additionally, machine learning can forecast financial outcomes such as capital structure, debt ratios, and future profits, while employing highly advanced techniques to assess the creditworthiness of groups that have not benefited from traditional models, thereby enhancing financial inclusion (Mestiri, 2024).

3.2. Predictive Analytics:

Predictive analytics combines statistical algorithms and machine learning to produce advanced models with strong predictive capabilities, enhancing decision-making effectiveness in financial institutions. Predictive analytics has gained importance by improving the accuracy of forecasts by up to 30%. Utilizing past data to predict future outcomes helps financial managers make informed decisions related to investments, pricing strategies, and resource allocation. Additionally, these methods assist in identifying potential threats and assessing their impacts, making them an effective tool in credit risk management and evaluation by analyzing past loan performance and classifying borrowers according to risk levels, thereby making credit granting decisions more effective (Aro, 2024).

3.3. Robo-advisory and Portfolio Management:

The emergence of robo-advisors has transformed traditional investment approaches by relying on machine learning algorithms for portfolio management and allocation. This innovation has made such services accessible to a wider range of investors. However, the success of this technology remains contingent upon users' trust in the face of market volatility, as well as the continuous development of mathematical models that underpin robo-advisors to alleviate investors' concerns. Moreover, portfolio management using artificial intelligence faces several challenges, most notably the inherent complexity and uncertainty of financial markets. In addition, the benefits derived from these technologies may be limited for many firms, as they largely depend on each company's internal circumstances (Ashraf, 2024).

4. Artificial Intelligence in Agriculture:

The agricultural sector is one of the fundamental sectors upon which countries build their development strategies, given its importance in ensuring food security and fostering economic growth. However, developing this sector in a sustainable manner has become highly complex due to the increasing demand for diverse agricultural crops, the scarcity of water resources, climate change, and the reduction of arable land as a result of urban expansion. All these factors have created a strong incentive to seek

innovative solutions based on artificial intelligence applications, through precision agriculture technologies, agricultural robotics, and other advanced techniques.

4.1. Precision Agriculture:
Precision agriculture is among the most advanced techniques used in the agricultural sector, as it relies on drones, sensors, GPS systems, and the Internet of Things to collect vast amounts of essential data, thereby improving farm productivity and optimizing resource use. This technology allocates resources (inputs) according to the climate conditions and the targeted crop types, which ensures efficient and effective input management, reduces resource waste, and enhances productivity. The ultimate goal is to lower production costs, protect ecosystems, and improve crop quality (European Parliament, 2016).

4.2. Agricultural Robots:
The primary purpose of using robots in the agricultural sector is to reduce dependence on manual labor, increase operational efficiency, and improve product quality. Robots programmed with artificial intelligence automate heavy agricultural activities such as harvesting and weed removal, performing these tasks with high accuracy, continuously, and under all conditions, which contributes to enhancing productivity. Agricultural robots enable the adoption of a smart farming approach that focuses on monitoring crops, particularly in rural areas suffering from labor shortages. At the environmental level, experts expect that smart farming through the use of robots will contribute to reducing the carbon footprint, improving energy efficiency, and advancing the path toward sustainable agriculture that safeguards the rights of future generations (Aijaz et al., 2025).

4.3. Monitoring Soil Quality:
Agricultural soil, with its essential organic components, is a key factor in increasing crop yields and serves as an effective tool in addressing the growing demand for food. Farmers have long faced the challenge of soil incompatibility with certain crop types. However, with the advancement of artificial intelligence applications and machine learning techniques, it has become easier for farmers to monitor soil conditions through precise data on quality, fertility levels, and the availability or deficiency of nutrients and microorganisms. This is achieved using technologies based on image capture (computer vision) and deep learning, which have enabled artificial intelligence to surpass humans in this field. Consequently, farmers now have access to a vast amount of accurate information that allows them not only to monitor crop health but also to detect weaknesses in plant nutrition systems and predict agricultural yields based on the available data (Gangwar, 2023).

5. Challenges and Risks of Artificial Intelligence:

The features and advancements introduced by artificial intelligence, which have benefited many economic sectors, have also been accompanied by risks and challenges that require further efforts to overcome them, in order to enable this technology to perform its role as intended.

5.1. Automation and Employment:
The issue of replacing humans with machines is not a recent one; its roots go back to the beginning of the Industrial Revolution. However, the matter has become more pressing due to the tremendous development of AI-powered robots, which are now capable not only of performing simple tasks but also of carrying out many complex tasks that humans cannot accomplish. This, in turn, has led to increased productivity.

Opinions have varied regarding the impact of automation on employment. Some experts argue that improved productivity and the replacement of human tasks inevitably lead to a reduction in the number of jobs. Solos and Leonard (2022) hold that technological advancement expands production and increases capital, thereby contributing to the creation of new job opportunities. Although predictions indicate that many jobs will be lost in the future due to automation, robots cannot perform many skills

unique to humans, such as persuasion, negotiation, creativity, craftsmanship, as well as sensory abilities and complex manual artistic work. All these skills cannot be replaced by machines.

5.2. Income Inequality:

Income inequality is considered one of the prominent drawbacks associated with artificial intelligence. The replacement of human labor with machines leads to a decline in the wages of unskilled workers, while the wages of highly skilled workers increase, thereby widening the income gap. However, with the advancement of AI algorithms, skill has ceased to be a reliable criterion for job security, as even skilled workers are now threatened with job loss. Moreover, AI applications have enhanced the importance of capital in the production process, with returns on capital rising due to automation and robotics, which has further exacerbated the problem of income distribution inequality. The impact of artificial intelligence on income inequality is not confined to the production sphere alone but also extends regionally and globally. The substitution of robots for unskilled labor in developing countries results in a relative decline in wages, which, in turn, leads to the relocation of production to wealthier nations (Solos and Leonard, 2022).

5.2. Cyberattacks and Privacy:

The rapid development of artificial intelligence applications does not make them immune to cyberattacks; like other information systems, they remain vulnerable. The vast amount of data they handle and the sensitivity of the decisions made increase their exposure to hacking, which could result in data breaches and violations of privacy. Moreover, AI can be misused for illegal purposes through programming malicious algorithms or creating fake videos and audio recordings (deepfakes) aimed at spreading disinformation (Piton, 2023). Given the critical nature of the decisions made by AI tools, a pressing question arises: Who bears legal responsibility when harm results from AI-driven decisions? This issue becomes even more urgent when such decisions have severe consequences. For example, in the automotive industry, in the case of a traffic accident caused by a self-driving car, who should be held accountable, the manufacturer, the programmer of the autonomous system, or the vehicle owner? Such questions are likely to create hesitation among companies considering investment in AI unless clear rules and regulations are established to define legal responsibility in the event of disasters.

Conclusion

In light of the issues addressed in this article, it has become clear that artificial intelligence has gone beyond being merely a technological advancement to emerge as a transformative force that is reshaping various sectors and contributing to the development of innovative solutions**.** The results have shown its ability to reduce human errors and increase productivity in the industrial sector. Moreover, the introduction of surgical robots and remote monitoring systems in the healthcare sector has contributed to improving medical care and accelerating patient management procedures, even in critical cases. The study also confirmed the effectiveness of artificial intelligence in enhancing the accuracy of financial predictions for controlling loan issuance, assessing creditworthiness, and managing portfolios, thereby expanding access to investment services. The agricultural sector has also benefited from increased productivity through the use of robots and precise soil analyses, which help address labor shortages in rural areas.

Despite the aforementioned advantages of artificial intelligence, its use has revealed a number of fundamental risks that must be addressed with caution. In addition to ethical challenges, the issue of income inequality emerges as a result of replacing unskilled labor with machines, which necessitates the adoption of fair social and economic policies. The potential misuse of artificial intelligence for illegal purposes, such as spreading disinformation through deepfake technologies, requires strict legislation and the development of advanced protection systems. The greatest challenge facing the world today is achieving a balance between embracing technological innovation and addressing its associated risks, in

order to ensure a future that serves humanity and promotes comprehensive progress rather than deepening existing gaps.

To conclude, and to ensure the optimal utilization of artificial intelligence applications while mitigating their potential risks, several recommendations can be made. First, it is essential to establish clear legal and ethical frameworks that define accountability and safeguard privacy. In the agricultural sector, artificial intelligence should be directed toward promoting precision farming and supporting small-scale farmers to reduce production gaps. In the industrial sector, balanced automation strategies are needed to increase productivity while preserving employment opportunities. In healthcare, the use of medical robots and diagnostic systems must comply with strict safety standards, with final decisions remaining under human supervision. In the financial sector, artificial intelligence based credit assessment and portfolio management should be accompanied by transparent mechanisms to prevent bias and protect customers data. Finally, strengthening cybersecurity, encouraging interdisciplinary research, and enhancing international cooperation are crucial to address cross-border risks such as cyberattacks and deepfakes. Together, these measures will help ensure that artificial intelligence serves as a driver of inclusive and sustainable development rather than a source of inequality and instability.

Bibliography

1. Padmaja, C. V. R., Narayana, S. L., Anga, G. L., & Bhansali, P. K. (2024). The rise of artificial intelligence: A concise review. IAES International Journal of Artificial Intelligence, 13(2), 2226–2235. https://doi.org/10.11591/ijai.v13.i2.pp2226-2235.
2. Tay, S. I., Lee, T. C., A. H., N., & Ahmad, A. N. A. (2018). An Overview of Industry 4.0: Definition, Components, and Government Initiatives. *Journal of Advanced Research in Dynamical and Control Systems*, *10*(14-Special Issue), 1378-1387.
3. Ezin, E. C. (2024). Historique et clarifications conceptuelles du Big Data [Technical Report]. ResearchGate. https://doi.org/10.13140/RG.2.2.24400.30726.
4. Fondation de l'Académie des Technologies. (2020). *Les robots dans l'industrie : Saisir l'opportunité* [Report]. Fondation de l'Académie des Technologies.
5. Qin, J., Liu, Y., & Grosvenor, R. (2016). A categorical framework of manufacturing for Industry 4.0 and beyond. *Procedia CIRP*, *52*, 173–178. https://doi.org/10.1016/j.procir.2016.08.005.
6. Schumacher, A., Erol, S., & Sihn, W. (2016). A maturity model for assessing Industry 4.0 readiness and maturity of manufacturing enterprises. *Procedia CIRP*, *52*, 161–166. https://doi.org/10.1016/j.procir.2016.07.040.
7. TRA-C industrie. (2025). *Industrial robotics: challenges and benefits*. Retrieved September 30, 2025, from https://www.tra-c.com/fr/ingenierie-industrielle/robotique-industrielle-enjeux-et-interets/
8. International Federation of Robotics. (2024). *World Robotics 2024* [Press conference presentation]. International Federation of Robotics.
9. Udegbe, F. C., Ebulue, O. R., Ebulue, C. C., & Ekesiobi, C. S. (2024). *The role of Artificial Intelligence in healthcare: A systematic review of applications and challenges*. *International Medical Science Research Journal, 4*(4), 500-508. https://doi.org/10.51594/imsrj.v4i4.1052
10. Quazi, S., Saha, R. P., & Singh, M. K. (2022). Applications of artificial intelligence in healthcare. Journal of Science, Education and Technology, 10(1), 211–226. https://doi.org/10.18006/2022.10(1).211.226.
11. Viswanathan, P. S. (2025). *Artificial intelligence in financial services: A comprehensive analysis of transformative technologies and their impact on modern banking*. *International Journal of Research in Computer Applications and Information Technology (IJRCAIT)*, *8*(1), 336-352. https://doi.org/10.34218/IJRCAIT_08_01_030.
12. Mestiri, S. (2024). *Machine learning techniques in financial applications*. Journal of Research, Innovation and Technologies, 3(1), 30-40. https://doi.org/10.57017/jorit.v3.1(5).02.

13. Aro, O. E. (2024). Predictive analytics in financial management: Enhancing decision-making and risk management. *International Journal of Research Publication and Reviews, 5*(10), 2181–2194. https://doi.org/10.55248/genpgi.5.1024.2819.
14. Ashraf, M. (2024). Analyze the impact of artificial intelligence on finance portfolio management. *International Journal of Science and Research (IJSR), 13*(12), Article SR241211101339. https://doi.org/10.21275/SR241211101339.
15. **European Parliament. (2016).** *EPRS study Research for TRAN Committee: The impact of connected and automated vehicles on the EU transport system* **(EPRS_STU(2016)581892). European Parliamentary Research Service.** https://www.europarl.europa.eu/RegData/etudes/STUD/2016/581892/EPRS_STU(2016)581892_FR.pdf.
16. Aijaz, N., Lan, H., Raza, T., Yaqub, M., Iqbal, R., & Pathan, M. S. (2025). *Artificial intelligence in agriculture: Advancing crop productivity and sustainability*. Journal of Agriculture and Food Research, 20, 101762. https://doi.org/10.1016/j.jafr.2025.101762.
17. Gangwar, P. (2023, April). *Artificial Intelligence in Agriculture*. Just Agriculture Newsletter, Vol. 3, Issue 8. https://justagriculture.in/files/newsletter/2023/April/103.%20Artificial%20Intelligence%20in%20Agriculture.pdf.
18. Solos, W. K., & Leonard, J. (2022). On the impact of artificial intelligence on economy. *Science Insights, 40*(2), 391–400. https://doi.org/10.15354/si.22.re066.