

The use of artificial intelligence in companies: what are the challenges and ethical issues?.

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Abstract

This research explores the impact of the use of artificial intelligence (AI) in business, highlighting the ethical issues and challenges associated with its use in business, particularly the protection of personal data and algorithmic bias. It traces the evolution of AI, its economic applications in various sectors such as finance, healthcare, education and marketing, and the ethical concerns that arise from it, such as the transparency and explainability of systems. Finally, it offers recommendations to ensure the responsible integration of AI in companies promoting training, regulation, and governance mechanisms to enhance competitiveness while respecting ethical and social principles.

Keywords Artificial intelligence, company, ethical challenges, ethical issues.

Introduction

The integration of artificial intelligence (AI) into economic activities constitutes one of the most significant transformations of the 21st century, redefining mechanisms of value creation and capture on a global scale (Obschonka & Audretsch, 2023).

Artificial intelligence is profoundly transforming the world, disrupting all human activities, from medicine to national security. No longer confined to augmenting human activity, contemporary systems increasingly assume autonomous forms including embodied robots, software systems, and virtual agents. As AI consolidates its role as a strategic determinant of organizational competitiveness, its ethical implications and attendant challenges warrant urgent and systematic scrutiny (Benanti, 2020).

Companies now stand at a crossroads: while the adoption of AI promises greater efficiency and personalized services, it also raises fundamental concerns around data protection, transparency, and accountability.

This study aims to explore the ethical challenges of using artificial intelligence in business through a comprehensive literature review, addressing the central question: **What are the major ethical issues and challenges associated with AI in companies, and how can they be addressed?**

Our research has the following specific objectives:

1. Identify the major ethical issues and challenges related to AI in organizational contexts.
2. Analyze the concrete risks stemming from AI integration such as algorithmic bias, data protection and responsibility.
3. Propose a set of practical recommendations for the ethical governance of AI in companies.

The document is structured as follows. The first part provides a literature review on the history and definition of artificial intelligence, tracing its evolution from early developments to its pervasive role in daily life. We highlight the milestones that are shaped like AI as we know it today.

The second part analyzes the current applications of AI in the economic sphere, emphasizing its potential to catalyze innovative business models, for example, smart supermarkets offering personalized services. We also consider how AI can foster inclusive growth and the challenges it may present for Moroccan businesses of all sizes, including SMEs and artisans.

The third part focuses on the ethical challenges of AI adoption in companies. We discuss growing concerns regarding personal data protection, algorithmic bias, and the implications of AI for corporate social responsibility. This section underscores the urgent need for strong ethical practices to ensure responsible use of AI.

Finally, we propose concrete recommendations for ethical AI deployment. These include establishing clear ethical frameworks, investing in continuous employee training, and implementing regular evaluation mechanisms for AI systems, with particular attention to transparency and fairness in their application.

1. Methodology

Our study is primarily based on a literature review that adopts a theoretical and analytical approach. First, we conducted a rich, relevant, and comprehensive review of literature in the field of artificial intelligence and ethics, with a particular focus on existing models. We followed a protocol that began with selecting impactful articles in the field of artificial intelligence and ethics, combining the following keywords: ethics, business ethics, artificial intelligence, ethical challenges and issues of AI. The search was conducted across the most credible databases, namely Cairn, Scopus, Springer, HAL, ResearchGate, Google Scholar, ScienceDirect, and Web of Science.

To ensure the relevance of the selected articles, our research was carried out in both English and French. Approximately forty articles were initially selected, and after filtering based on thematic relevance and depth of ethical analysis, a total of 28 articles were retained.

2. Literature Review

2.1. Artificial Intelligence (AI): History and Definition of the Concept

The history of artificial intelligence (AI) is a fascinating evolution spanning several decades. This first section highlights key milestones that have marked its development, long before the profound impact it would have on our daily and professional lives.

2.1.1. The Emergence of Artificial Intelligence

- **1943:** Warren McCulloch and Walter Pitts proposed a model of the formal neuron (McCulloch, W. S. & Pitts, W. (1943), *A Logical Calculus of the Ideas Immanent in Nervous Activity*, *Bulletin of Mathematical Biophysics*, pp: 115-133).
- **1950:** Alan Turing published *Computing Machinery and Intelligence*, in which he introduced the test that now bears his name, designed to evaluate machine intelligence. This test remains widely used today (Turing, A. M. (1950), *Computing Machinery and Intelligence*, *Mind*, Vol.59, N.236, pp: 433-460).
- **1956:** The Dartmouth Conference marks the official beginning of “Artificial Intelligence” ([Dartmouth workshop - Wikipedia](#) Consulté le 09/10/25).
- **1958:** The computer scientist John McCarthy coined the term “artificial intelligence” and became one of its pioneers alongside Marvin Lee Minsky (McCarthy, J. (1958),

Programs with Common Sense, in Proceedings of the Teddington Conference on the Mechanization of Thought Processes).

- **1969:** The ARPANET (the precursor to the Internet) is created, fostering the dissemination of ideas and research in AI (Hafner, K. & Lyon, M., Where wizards stay up late: The origins of the internet).
- **1997:** IBM's Deep Blue defeats world chess champion Garry Kasparov, marking a major milestone in the evolution of game-oriented AI ([Deep Blue versus Garry Kasparov - Wikipedia](#) Consulté le 09/10/25).
- **2010:** Emergence of the new generation of artificial intelligence ([Timeline of AI Achievements](#) Consulté le 09/10/25).
- **2012:** AlexNet revolutionizes computer vision with deep neural networks (Hinton, G. E. & Sutskever, I. & Krizhevsky, A., ImageNet Classification with Deep Convolutional Neural Networks).
- **2014:** Google acquires DeepMind, a company specializing in AI and machine learning ([Google DeepMind - Wikipedia](#) Consulté le 09/10/25).
- **2016:** AlphaGo, developed by DeepMind, defeats world Go champion Lee Sedol ([AlphaGo - Google DeepMind](#) Consulté le 09/10/25).
- **2020:** Democratization of AI: the launch of GPT-3 by OpenAI, a groundbreaking language model ([Gpt 3: The Revolutionary AI Model by OpenAI](#) Consulté le 09/10/25).
- **2021:** Introduction of Codex and DALL·E by OpenAI, expanding AI's capabilities in code generation and image creation.
- **2023:** Launch of GPT-4. Integration of DALL·E into ChatGPT Plus. Public release of Google Bard and Bing Chat, marking a new era in the use of AI for human interaction.
- **2024:** Launch of GPT-4o, a major breakthrough in generative AI, enhancing text, image, and graphic processing, with advanced voice mode enabling more natural interactions.
- **2025:** Advanced multimodality: ChatGPT-5 will be able to simultaneously understand and generate text, images, audio, and code, with improved cross-modal coherence.
- **The following years:** Advances in artificial intelligence (AI) will transform modern life by reshaping transportation, health, science, finance, and the military. To adapt public policy, we need to better anticipate these advances. Here we report the results from a large survey of machine learning researchers on their beliefs about progress in AI. Researchers predict AI will outperform humans in many activities in the next ten years, such as translating languages (by 2024), writing high-school essays (by 2026), driving

a truck (by 2027), working in retail (by 2031), writing a bestselling book (by 2049), and working as a surgeon (by 2053). Researchers believe there is a 50% chance of AI outperforming humans in all tasks in 45 years and of automating all human jobs in 120 years, with Asian respondents expecting these dates much sooner than North Americans. These results will inform discussion amongst researchers and policymakers about anticipating and managing trends in AI.

2.1.2. Definition of the Concept of Artificial Intelligence

According to John McCarthy, one of the pioneers of artificial intelligence, AI is defined as “the science and engineering of creating intelligent machines”. AI is thus a field of computer science aimed at designing systems capable of performing tasks that normally require human intelligence.

For (Huang et al., 2019), AI is defined as a set of technologies and computer programs that simulate the functioning and intelligence of the human brain.

AI systems demonstrate a form of mechanical intelligence by efficiently performing cognitive and/or repetitive tasks, while automatically learning from data to improve their performance. This learning ability derives from access to large datasets (Big Data), which include information in the form of text, audio, or video. Such data enables AI systems to learn through computational methods such as deep learning and machine learning. Deep learning employs artificial neural networks to analyze and interpret complex data, while machine learning focuses on developing algorithms that allow computer programs to improve automatically through experience (Mitchell, 2017). These fields leverage computers to simulate the human learning process by identifying and assimilating knowledge about the real world, then optimizing performance based on this new information (Ounahr & El Khattaby, 2024).

AI is often perceived as a broad and complex concept, difficult to define precisely due to its constantly evolving nature. For example, technologies ranging from simple recommendation algorithms used by Netflix, as reported by *Forbes*, to advanced autonomous driving systems developed by companies such as Tesla, are all considered forms of AI. This diversity makes the field both fascinating and complex, with definitions evolving alongside technological progress.

2.2.Integration of Artificial Intelligence in companies

2.2.1. Integration of Artificial Intelligence in companies: A General Context

It is crucial for companies to invest in AI integration to remain competitive over the next 5 to 15 years. According to a Deloitte report, “only 16% of Canadian companies have adopted this technology” (Plouffe, 2018). Makridakis (2017) further develops this idea and envisions four possible scenarios for the future of AI.

The first scenario is optimistic, as envisioned by Kurzweil (1990). He imagines a future reminiscent of science fiction, where advances such as genetic medicine could control heredity and eliminate transmissible diseases. Nanotechnology might make any innovation tangible through 3D materialization, while the automation of work could allow humans to focus exclusively on leisure.

By contrast, pessimists envision a much darker scenario. They fear the delegation of crucial decision-making to machines, which could reduce humans to second-class citizens. Many jobs would be at risk, including highly skilled professions. Sectors such as transportation, with the advent of autonomous driving, could lead to the disappearance of countless jobs, from taxi drivers to truck operators.

Another scenario, that of the skeptics, is based on the idea that AI will never surpass certain limits and will never truly take a central place in our world. According to them, if AI cannot demonstrate creativity, it can never equal humans.

Finally, the last scenario, that of the pragmatists, is not alarmed by AI. From this perspective, AI will continue to advance, but humans will always retain a certain advantage over technology. The author appears to favor Kurzweil's (1990) optimistic scenario, according to which computer intelligence will reach human levels by 2029. In this perspective, AI machines are expected to become fully autonomous by 2045, a relatively near future. Companies that subscribe to this view have already begun integrating AI into their processes. The author refers to them as 'digital firms.' Compared to traditional companies, these firms generally employ about 15% fewer staff, have higher market capitalization, yet generate lower revenues. This discrepancy is explained by their recent investments in AI, whose positive returns will take time to materialize. In the long term, however, such investments are expected to enhance productivity, foster product innovation, and drive future revenue growth (Makridakis, 2017).

We are currently experiencing the fourth industrial revolution, marked by the emergence of new technologies and innovations. The corporate landscape has shifted rapidly: whereas in 1995 leading firms included General Motors, Ford, and Exxon, by 2016 giants such as Walmart, Exxon, and Apple had taken their place. The pace of change is accelerating, and the most successful companies are those that understand and adapt the fastest (Makridakis, 2017).

Today, scarce resources such as gold, diamonds, and minerals have lost much of their relative value. Real wealth now lies in knowledge and data, which have become far more valuable. Power is increasingly located in the intangible. Knowledge of engineering, developed in the 1970s, has thus become an essential component of AI. Artificial intelligence relies on access to

data and knowledge, and once this knowledge is available, effective tools and algorithms can be designed to optimize business operations (Hoeschl, 2006).

AI can be integrated across various sectors, including manufacturing, where it transforms firms into ‘Smart Factories.’ Such companies benefit from more flexible, faster, and technologically advanced production processes with minimal human intervention, enabled by robotics and system digitalization (Oztemel, 2018).

In the service sector, AI enhances customer relationship management. For instance, while the cost of an in-store interaction is around \$10, an online interaction costs only \$0.01, making digital interactions highly cost-effective (Kadam et al., 2002). Emails, websites, tutorials, chatbots, and forums represent efficient and economical tools for engaging with customers. Effective online customer relationship management is also strongly associated with greater consumer satisfaction.

AI further improves service quality and reduces human error (Han et al., 2020). For example, Kroger and Microsoft collaborate to create smart supermarkets that deliver personalized advertising and real-time product information. Similarly, Walmart employs AI-powered cameras to detect out-of-stock items and alert staff instantly. In North America, some AI-equipped cameras can even analyze customers’ emotions to tailor services to their needs (Bock et al., 2020).

2.2.2. Integration of Artificial Intelligence in companies: The Moroccan Context

In its publication *The State of AI: How Organizations Are Rewiring to Capture Value* (March 2025), the McKinsey Global Institute highlights the growing impact of artificial intelligence on businesses worldwide. The survey, conducted across 101 countries including Morocco reveals that more than three-quarters of companies have integrated AI into at least one function, compared to just over half the previous year. This rapid adoption is transforming governance models and organizational processes, with an increasing involvement of top management. The report also notes that just under one-third of the companies studied have placed AI oversight directly under the responsibility of their CEO (Chui, M. & Hall, B. & Singla, A. & Sukharevsky, A. & Yee, L. 2025, *The State of AI: How Organizations Are Rewiring to Capture Value*).

In Morocco, large companies are beginning to invest in artificial intelligence (AI) and are adopting different strategies to integrate it into their processes. Groups such as OCP and Attijariwafa Bank make strategic decisions directly under the guidance of their top executives, while others, such as BMCE Bank of Africa and Maroc Telecom, follow a hybrid model with departments dedicated to innovation and digital transformation. Royal Air Maroc and Inwi, on the other hand, centralize responsibilities more heavily within their technical departments. AI

enables Moroccan companies to optimize operations, personalize services, and strengthen competitiveness. For instance, OCP applies AI to natural resource management and smart agriculture, banks leverage it for fraud detection and personalized offers through chatbots, while telecom operators use it for network management and enhancing customer experience (Bennani¹, A. 2025).

A critical question remains: should AI be reserved for large corporations, or can it also benefit SMEs and artisans? A systemic approach is essential, integrating all stakeholders while considering the interplay of technology, the economy, and social transformation. A McKinsey report highlights that generative AI may redefine business models by reorganizing structures to improve productivity and efficiency. However, companies must also anticipate challenges such as inaccuracies, cybersecurity risks, and intellectual property concerns. While large Moroccan firms are reinforcing their teams to support this transition, SMEs and artisans require support to overcome technological and financial barriers.

AI can serve as a driver of inclusive growth but ensuring that digital transformation benefits the entire economy requires strong governance and a systemic approach that includes large corporations, SMEs, and artisans. Such an approach would foster an equitable and sustainable digital transition, reduce technological inequalities and enable smaller economic actors to benefit from AI opportunities (Bennani, 2025).

In summary, artificial intelligence has evolved rapidly since the 1940s, from simple neural models to advanced systems such as GPT-4o. Defined as the science of creating machines capable of simulating human intelligence, AI relies on machine learning and the exploitation of massive datasets. In the business world, it is viewed as a strategic lever for productivity, innovation, and competitiveness. Various scenarios envision their future from optimistic views of machines surpassing humans to more skeptical perspectives. AI is already integrated into smart factories, customer service, and operational management. In Morocco, leading firms such as OCP and Attijariwafa Bank are spearheading this transformation. Yet, for AI to benefit the entire economic fabric, including SMEs and artisans, an inclusive systemic approach is essential to ensure an equitable digital transformation that fosters sustainable growth.

¹ Dr. Az-Eddine Bennani est ingénieur en informatique, titulaire d'un MBA de Chicago, docteur en sciences économiques de la Sorbonne, et expert en management stratégique, gouvernance digitale et intelligence artificielle. Avec plus de 40 ans d'expérience en France, au Maroc et à l'international, il a été ingénieur système, consultant et manager chez Hewlett-Packard en France, en Europe et au MEA, a été professeur-chercheur à La Sorbonne Universités/UTC et à NEOMA Business School, et est actuellement professeur associé à l'Université Al Akhawayn.

2.3. Floridi's Five Principles for Artificial Intelligence in Society

In 2019, Floridi developed a model based on five fundamental principles to guide the development and use of AI in society, drawing on a synthesis of multiple sets of principles from international organizations and authoritative documents (Floridi & Cowls, 2019).

Table 1: Floridi's five principles for AI in society

Principle	Description
Beneficence	AI should act to promote the central importance of the common good and the protection of humanity and the planet, while enhancing well-being and contributing to positive outcomes.
Non-maleficence	Although beneficence (doing good) and non-maleficence ("avoiding harm") may appear similar, they are in fact distinct. AI must avoid causing harm or damage, including ensuring privacy, security, and protection against malicious use.
Autonomy	AI should respect the ability of humans to make their own decisions. It must preserve individual freedom and capacity for choice, avoiding undue interference with human autonomy.
Justice	AI systems should guarantee fairness, prevent discrimination, and ensure that their benefits are distributed equitably across society.
Explicability (or Transparency)	This principle, added by Floridi, stresses the need for AI to be understandable to both users and developers. It involves intelligibility knowing how AI works and accountability being able to assign responsibility. This principle is essential to ensure trust, responsibility, and ethical compliance.

Source: Authors

Floridi's model demonstrates that these five principles are interconnected and fundamental to ensuring responsible and ethical AI that serves the common good. They provide a framework for designing policies, regulations, and best practices across industries and jurisdictions.

2.4. What are the ethical issues and challenges of using artificial intelligence in companies?

Artificial intelligence has now become a major issue in the business world. By integrating cutting-edge technologies, companies can optimize their processes, increase efficiency, and offer tailor-made services to their clients. AI encompasses various techniques, such as machine

learning and predictive analytics, enabling organizations to process vast amounts of data and extract key insights.

The adoption of these technologies allows companies to remain competitive while anticipating future market needs. However, this transformation comes with significant ethical challenges. Businesses must navigate a constantly evolving technological environment while considering ethical and legal considerations.

The implementation of AI requires careful reflection on its impact on employees, customers, and society. It is therefore essential to approach this transition with caution, ensuring the adoption of a responsible and ethical approach.

We will therefore dedicate this section to presenting the major ethical issues and challenges related to the use of AI within organizations.

2.4.1. The Ethical Issues of Using Artificial Intelligence in companies

Artificial intelligence offers multiple advantages, but it also comes with major ethical concerns that require constant attention. Several ethical issues related to the use of AI in companies have been identified in the literature.

Floridi (2019) emphasizes that the protection of privacy and personal data represents a central ethical issue in the era of rapid digital expansion. Data protection is a crucial challenge in the context of artificial intelligence, especially since companies collect and analyze vast amounts of data to feed their algorithms. This raises major concerns regarding the confidentiality and security of sensitive information. Strict regulations, such as the General Data Protection Regulation (GDPR) in Europe, impose rigorous requirements on companies regarding the processing of personal data, demanding full transparency about how customer data is collected, used, and stored.

To ensure compliance, it is essential to adopt strong data management practices. This includes developing clear policies on data collection and processing, as well as providing continuous employee training on best practices for data protection. For example, using anonymization tools to preserve user identity during data analysis can be an effective way to strengthen confidentiality.

Floridi (2019) also stresses the need to ensure fairness and inclusivity in the development and implementation of emerging technologies, including artificial intelligence. The presence of bias in algorithmic systems and the risk of discrimination raise significant ethical concerns, particularly for vulnerable populations. These algorithmic biases are not merely a technical issue they can also harm a company's reputation and its relationships with clients. A biased algorithm leading to unfair decisions can result in a loss of trust and potential legal

consequences. Therefore, leaders must adopt a proactive and responsible approach in evaluating and managing such biases.

Automated decision-making raises major ethical challenges. When algorithms influence decisions that impact individuals, it is crucial that these decisions remain fair and transparent. It is essential to ensure that AI systems do not reinforce or replicate pre-existing biases. This requires ongoing monitoring and regular evaluation of algorithms to identify and correct potential biases.

Winfield et al. (2020) explore the ethical issues associated with autonomous vehicles, highlighting the moral dilemmas linked to programming such vehicles in situations of unavoidable accidents. The way these systems make crucial decisions raises essential questions about responsibility and the ethical framework of such technologies (Dlimi S. et al., 2024).

Research by Diakopoulos (2020) addresses ethical challenges related to online misinformation and social media manipulation. The author highlights the problems caused by the spread of false information and recommendation algorithms, emphasizing the need for ethical regulation to counter these harmful phenomena affecting society (Dlimi S. et al., 2024).

Furthermore, Johnson et al. (2019) examine the ethical implications of the rise of automation in the workplace, particularly its effects on employment and working conditions. This evolution raises crucial issues of social justice, wealth distribution, and respect for human dignity, requiring a thorough ethical analysis of these transformations.

In summary, the ethical issues associated with artificial intelligence include the protection of privacy and personal data, algorithmic fairness, the accountability of autonomous systems, the regulation of digital misinformation, and the socio-economic impacts of automation.

To address these issues, several areas for reflection can be explored:

- Developing universal ethical standards to guide the design and use of artificial intelligence systems.
- Promoting independent algorithm audits to evaluate their impartiality and transparency.
- Encouraging diversity within development teams to reduce biases present in data and models.

Although not exhaustive, these measures provide a foundation for establishing a more ethical and responsible AI.

2.4.2. The Ethical Challenges of Using Artificial Intelligence in companies

The ethics of artificial intelligence (AI) has become an essential field as this technology becomes increasingly integrated into various aspects of daily and professional life (Dlimi S. & al., 2024).

Among the ethical challenges associated with AI are trust and regulation, bias and prejudice, algorithmic fairness, transparency, justice, accountability, and privacy protection.

Consulting firms such as EY, which aim to provide innovative solutions to their clients, have grouped the challenges of AI implementation into four main categories: *technology and data*, *talent and culture*, *return on investment*, and *ethical trust and regulations* (Aswani, 2020). In this study, we will focus on the fourth category: *ethical trust and regulations*.

The main challenge in this category lies in the difficulty of explaining what AI truly is. Its definition is complex and often hard to grasp. Even professionals in high technology sometimes struggle to fully understand and clearly explain AI to those who are less familiar with the field. As a result, establishing trust becomes difficult when dealing with such an uncertain concept. Another challenge lies in the fact that decisions made by AI algorithms can have both positive and negative consequences, just like human decisions. However, the question of accountability in cases of negative outcomes remains ambiguous and gives rise to considerable debate. Moreover, regulations and compliance requirements which vary from one region or country to another can hinder AI development.

According to Aswani (2020), biases and ethical concerns also represent significant challenges. Although these tend to diminish over time, they remain obstacles that must be carefully considered.

A major challenge also lies in the risk of algorithmic bias, where AI models can reproduce or even amplify existing inequalities if the data used for their training is biased. O'Neil (2016) criticizes AI systems that, under the guise of mathematical objectivity, reinforce social inequalities, thereby highlighting the urgent need for stricter regulation and more ethical design of such technologies.

For example, consider the use of AI in human resource functions particularly in talent recruitment. The key question here is: to what extent can a machine accurately assess whether a candidate fits a company's needs? Several prototypes have been developed to replace human recruitment with AI systems. However, the issue was not the lack of data, but the *bias* in the data. Influenced by historical human recruitment decisions, AI systems tended to favor male candidates while excluding minorities. The real challenge here lies in the *quality of data* (Chevalier, 2021).

Similarly, Jobin et al. (2019) examined various ethical guidelines for AI published globally, identifying recurring themes such as transparency, fairness, and accountability, while also highlighting cultural and operational variations in their implementation.

Accountability in AI is also a critical issue. Who should be held responsible when AI makes a mistake or causes harm? Rahwan (2018) explores this question by proposing models of *shared responsibility*, in which developers, users, and even regulators jointly assume accountability for AI outcomes.

Privacy protection represents another major concern, particularly with the rise of AI-based surveillance and massive data collection. Wachter (2017) argues that current data protection laws must be revised to better address the challenges posed by AI especially regarding implicit consent and personal data management.

In conclusion, as AI continues to evolve, it is essential not to underestimate the importance of ethics in its design and use. Ethical challenges must be addressed proactively to ensure that technological innovation advances in full respect of human rights and dignity.

3. Some Recommendations for the Ethical Use of Artificial Intelligence in companies

The adoption of artificial intelligence in companies indeed represents a valuable opportunity to transform operations and seize new possibilities. However, a thoughtful and responsible approach is essential to avoid the ethical and social risks associated with its use. The following recommendations aim to strengthen responsibility and transparency in the adoption of AI:

- **Establish a clear ethical framework to guide AI initiatives:** Ensure that the company has a strong ethical charter defining principles such as transparency, fairness, and accountability. This framework should guide all AI projects from design to implementation to guarantee that they adhere to high ethical standards.
- **Invest in continuous training to prepare employees for technological challenges:** Since AI is constantly evolving, it is crucial to provide ongoing training for employees so that they are not only technically proficient but also aware of the ethical and social implications of AI use. Such training helps teams better manage the challenges posed by emerging technologies.
- **Implement mechanisms to regularly monitor and evaluate AI systems:** AI systems must be continuously audited to detect potential biases, errors, or malfunctions. Regular assessments allow organizations to make real-time adjustments and ensure that AI remains aligned with the company's ethical objectives.
- **Be transparent about data collection and usage practices:** Transparency is a fundamental principle for building trust. Clearly explain how data is collected, stored, and used, and ensure that clients and partners fully understand how their information is handled. This also includes respecting the confidentiality of personal data in compliance with local and international regulations.

- **Diversify datasets to minimize the risk of discrimination:** Using diverse datasets is essential to avoid developing biased algorithms. Ensure that data is representative of different demographic groups and contexts to promote fairer decision-making and reduce the risk of unintended discrimination.

By following these recommendations, companies can not only maximize the potential of AI to enhance business performance but also contribute to the responsible and inclusive development of this technology in the corporate world. This will foster greater public acceptance of AI and help create an environment where innovation advances in alignment with human and ethical values.

Conclusion

Artificial intelligence is a recent, complex, and difficult concept to define. Companies that can invest in integrating AI into their processes are likely to benefit significantly, as AI and competitiveness are closely linked. What today appears to be a simple opportunity will become a necessity within the next decade.

The future of AI looks particularly promising, with forecasts predicting its increasing use across various sectors such as healthcare, education, the environment, and many others. Researchers and companies are actively working on projects aimed at making AI not only more efficient but also more ethical. In the coming years, new and revolutionary applications of AI are expected to emerge, further transforming our daily lives.

BIBLIOGRAPHY

- Abid, R. (2021), Pour une éthique de l'intelligence artificielle. *Gestion*, Vol.46, n°2, pp : 100-104.
- Benanti, P. (2020), Algor-éthique : intelligence artificielle et réflexion éthique, de l'éthique de la technologie à l'algor-éthique, *Revue d'éthique et de théologie morale*, N°307, pp : 93-110.
- Bock, D. E., Wolter, J. S., & Ferrell, O. C. (2020), Artificial intelligence: disrupting what we know about services, *Journal of Services Marketing*, Vol.34, N°3, pp: 317-334.
- Bounahr, I. & El Khattab, Y. (2024), Éthique et IA : un duo gagnant pour booster les performances académiques des étudiants de l'enseignement supérieur au Maroc ? *Revue Internationale des Sciences de Gestion*, Vol. 7, N°3, pp : 912-937.
- Chevalier, F. & Déjoux, C. (2021), intelligence artificielle et management des ressources humaines : pratiques d'entreprises, enjeux numériques, *Annales des mines*.
- Dlimi, S. & Al (2024), Les Défis Éthiques de l'Innovation Technologique : Perspectives de l'Entrepreneuriat Responsable, *Revue Française d'Economie et de Gestion*, Vol. 5, N°7, pp :183-207.
- Floridi, L. (2019), Soft ethics and the governance of the digital, *Philosophy & Technology*, Vol.32, N°1, pp: 1-8.
- Floridi, L. et Cowls, J. (2019), A Unified Framework of five principles for AI in society, *Harvard data science review*, issue 1.1.
- Gautier, L. (2019), La guerre augmentée ? Enjeux et défis de l'IA dans les conflits futures, pp : 83-93.
- Hafner, K. & Lyon, M. (1998), Where wizards stay up late: The origins of the internet.
- Hartmann, P. & Lussier, B. (2019), The role of ethical values in responsible entrepreneurship: A systematic review and research agenda, *Journal of Business Ethics*, Vol.159, N°1, pp: 111-135.
- Hinton, G. E. & Sutskever, I. & Krizhevsky, A., ImageNet Classification with Deep Convolutional Neural Networks.
- Hirsch, E. (2023), L'intelligence éthique : mais où prendrons-nous un port dans la morale, pp : 53-64.
- Khan, A. A., Badshah, S., Liang, P., Khan, B., Waseem, M., Niazi, M., & Akbar, M. A. (2021), Ethics of AI: A Systematic Literature Review of Principles and Challenge.
- Makridakis, S. (2017), The forthcoming artificial intelligence (AI) revolution: its impact on society and firms, *Futures*, N°90, pp: 46-60.

- Mathews, J.M. (2023), Un cadre d'autorégulation pour l'éthique de L'IA : opportunités et défis, *vie et sciences de l'entreprise*, n° 216-217, pp : 288-311.
- McCarthy, J. (1958), Programs with Common Sense, in *Proceedings of the Teddington Conference on the Mechanization of Thought Processes*.
- McCulloch, W. S. & Pitts, W. (1943), A Logical Calculus of the Ideas Immanent in Nervous Activity, *Bulletin of Mathematical Biophysics*, pp: 115-133.
- Naveen, J. (2019), 4 challenges to AI adoption and their solutions, *Allerin*.
- O'Neil, C. (2016), *Weapons of math destruction: How big data increases inequality and threatens democracy*, Crown.
- Roberts, H. & Cowls, J. & Morley, J. & Taddeo, M. & Wang, V. & Floridi, L. (2021), The role of transparency in ethical and accountable AI development, *Artificial Intelligence and Ethics*.
- Russel, S. J., & Norvig, P. (2016), *Artificial intelligence : a modern approach*, Pearson.
- Saporta, G. (2018), *Une brève histoire de l'intelligence artificielle*, Hal Open Science.
- Siau, K., & Wang, W. (2020), Artificial Intelligence (AI) Ethics: Ethics of AI and Ethical AI, *Journal of Database Management*, Vol.31, n°2, pp: 74-87.
- Stahl, B. C. (2021), *Artificial Intelligence for a Better Future: An Ecosystem Perspective on the Ethics of AI and Emerging Digital Technologies*, Springer.
- Thompson, S., et al. (2021), Enhancing stakeholder engagement in AI development, *Journal of AI Research*.
- Turing, A. M. (1950), Computing Machinery and Intelligence, *Mind*, Vol.59, N.236, pp: 433-460.
- Winfield, A. F., et al. (2020), Towards ethical standards for robots in the real world, *Nature Electronics*, Vol.3, N°1, pp: 12-20.