# Ethical Implications and Governance of Artificial Intelligence in Business Decisions: A Deep Dive into the Ethical Challenges and Governance Issues Surrounding the Use of Artificial Intelligence in Making Critical Business Decisions

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**Abstract:** This paper focuses on governance frameworks as a means of addressing the pressing need to identify ethical challenges surrounding the applications of artificial intelligence (AI) in making critical business decisions, to help businesses navigate the ethical issues of AI-driven decision-making. The study employs a qualitative methodology to investigate current literature, assess regulatory frameworks, examine case studies from the real world, and suggest moral guidelines to address ethical dilemmas and governance concerns in AI applications.Results point to a variety of problems, including algorithmic biases, data storage procedures, and AI-powered business decisions. The study places a strong emphasis on moral issues, which is consistent with responsible AI development. Assessing regulatory environments, the research pinpoints opportunities for enhancement and efficiency. The recommendations emphasize the continued significance of ethical issues in AI and promote public awareness, developer accountability, user empowerment, and stringent regulations. The recommendations prioritize societal well-being and individual privacy to encourage the responsible deployment of AI.Therefore, to navigate the complex intersection of AI and privacy, researchers, policymakers, developers, and users can benefit substantially from the insights provided by this research.

**Keywords:** AI utilization, governance, corporate decision-making, AI risks, governance issues

## I. Introduction

Artificial intelligence (AI) is atechnological innovation that is fundamentally changing every aspect of how businesses operate (Perifanis & Kitsios, 2023). The information produced by humans that is machine-assisted, structured, and organized is referredto as AI. Therefore, AI is the term used to describe human-generated structured, organized, and machine-assisted information. In this sense, the development of AI makes use of human insight techniques such as learning and reasoning(Tan et al., 2022).

Although AI has the potential to replicate decision-making processes and behaviours, it is related to technologies that emulate human intelligence. The majority of them are capable of handling challenging tasks on their own or with little assistance (LeCun et al., 2015; Zhang & Lu, 2021; Zhang et al., 2023). Artificial intelligence (AI) is concerned with expert systems that continuously learn through the acquisition of new data (Berente et al., 2021). According to Carvalho et al., (2019), these systems may rely on natural language processing speech recognition (Narwani et al., 2022), and/or machine vision (Silva et al., 2022).

AI is a dynamic field that has made considerable progress in the past few years (Lakshmi Aishwarya et al., 2022). Recent reports have revealed AI is growing in popularity across businesses, transforming decision-making and having an impact on several industries, including technology, e-commerce, transportation, marketing, management, and so on. AI has emerged as an essential tool that is reshaping industries and creating enormous economic value.The number of organizations using AI climbed by 270% over the last four years and tripled over the previous year, according to a Gartner report from 2019 (Panetta 2019).

AI has generated much optimism regarding its potential economic benefits; however, certain organizations that have recently begun AI implementation may face obstacles that impede their corporate advancement (Fountaine et al., 2019). The increasing integration of AI technologies into organizational workflows has highlighted the need for strong governance mechanisms and ethical considerations (Camilleri 2023). Additionally, ethical ramifications surrounding AI have attracted a lot of attention, especially when it comes to business decision-making (Ahmed et al., 2023). Nevertheless, governance procedures are being closely examined to guarantee the ethical, open, and accountable application of AI technologies(Wu et al., 2020). Employing AI to make business decisions presents a variety of ethical challenges arising from concerns of algorithmic equity and bias, to issues

relating to data privacy and transparency requiring careful consideration and thorough comprehension todevelop governance strategies that support ethical decision-making in AI-driven contexts.

In light of this, previous studies have provided valuable insights into the capabilities and applications of AI technologies (Collins et al., 2021; Adiguzel et al., 2023). Camilleri (2023) and Bankins& Formosa (2023) revealed that the use of AI in important business decisions raises some ethical questions and governance concerns that need to be thoroughly investigated. Thus, it is essential to comprehend and tackle these obstacles to optimize the advantages of AI while reducing any possible hazards. Though there are instances of favourable outcomes and evidence of AI implementation in specific industries and business settings, there exists a notable gap in the thorough exploration of the ethical implications and governance issues that are specific to integrating the broad use of AI into critical business decisions.It is therefore crucial to understand the ethical implications and governance aspects associated with AI in company decision-making. Hence, this studyidentifies the ethical challenges that surround the applications of AI in making critical business decisions, explores the governance frameworks to address the issues, and offers practical recommendations to enable businesses to navigate the ethics of AI-driven decision-making.The remaining sections of this paper are structured as follows: Section 2 reviews previous studies on ethical challenges and categorizes the issues that emanate from the integration of AI in critical business decisions; The integrated governance frameworks and how ethical issues affect the outcomes of AI-driven business decisions are discussed in Section 3, and the paper is concluded in Section 4.

## II. Literature review

A thorough synthesis and analysis of pertinent academic journals, industry reports, and research articles is covered in this section. It presents an in-depth review of earlier research on ethical issues as well as the concerns arising from the use of AI in crucial business decisions.

### 2.1. AI Ethics

The application of AI in corporate decision-making has resulted in a paradigm shift across various business sectors, with the advanced data analysis and predictive functions of AI becoming a crucial part of the decision-making process of globalorganizations (Brock & von Wangenheim, 2019). Thus, as companies utilize AI progressively to obtain a competitive edge, concerns about governance and ethical implications have emerged, requiring a thorough investigation.

AI has been used with varying degrees of success in a variety of social contexts and domains, such as marketing, employment, finance, education, and law enforcement (O'Neil, 2016; (Henry, 2018). A point of concern that has emerged regarding AI's adherence to ethical principles is that it is still in its relatively early stages of development and application (Bird et al., 2020). Another important question regarding how AI will be developed, used, and implemented in the future is whether or not the laws that currently exist can effectively regulate AI (Gervais, 2021). Furthermore, the (European Group on Ethics in Science and New Technologies Statement on Artificial Intelligence, Robotics, and Autonomous Systems, (2018) revealed that the challenge of governing AI was once limited to theoretical, technical, and academic discussions, but it has recently gained attention as governments and private businesses from geopolitical areas, such as the European Union, China, and the United States, have developed statements and policies regarding AI and ethics.

Theoretical resources for the ethical governance of AI are provided by the ethical concerns in emerging technology governance. A variety of perspectives have been employed to define the fundamental ideas, goals, and values of AI in order to influence the application process and choose the form of AI that should be developed. While there is ongoing debate about the concept of AI, this does not influence how AI is applied from a governance standpoint Ethical AI, Trustworthy AI (UK House of Lords, 2017;OECD, 2019), and "Responsible AI," (as proposed by AI Governance Committee -China's New Generation are some of the fundamental ideas that impact human-technology relations.

According to Teemu et al., (2023), technical, organizational, and policy levels should all be included in a comprehensive AI ethical governance framework. Therefore, in the context of modern technological frameworks and governance mechanisms, many novel concepts have surfaced recently. Previous evaluations suggest that AI technologies evolved together with the ethical issues surrounding their use (Stahl, 2021). In this regard, debates about fairness, accountability, and transparency have been spurred by the increasing use of AI in business decision-making. Subsequently, the importance of closely examining and addressing ethical issues in the development and application of AI systems has been highlighted by early cases of bias in algorithms (OECD 2022).

### 2.2. Global AI Strategies, Act, and Bill of Rights

The combination of regulatory frameworks and AI has emerged as a pivotal point in influencing the worldwide technological terrain(Xu et al., 2021). The AI Act, a document of legislation intended to regulate the use of AI technologies within its specific

member states, was published by specific Unions and geopolitical locations, which has been a leader in addressing the ethical and legal aspects of AI (*European Parliament AI Act*, 2019; Finocchiaro, 2023).Concurrently, many nations have outlined their national strategies, each of which embodies a distinct method for utilizing AI's potential while preserving social values and individual liberties. In addition, the debate over an AI Bill of Rights has gained momentum, highlighting the necessity of internationally recognized guidelines that direct the responsible advancement and application of AI technologies.This investigation explores the AI Act, offering an understanding of its main features, contrasting it with the AI policies of a few chosen nations, and investigating the idea of an AI Bill of Rights as an international ethical standard. Specifically, this is to break down the various viewpoints and legal strategies used by various organizations in navigating the ethics of AI development and application.

### 2.2.1    AI Act of the European Union

In April 2021, the European Union (EU) introduced "The AI Act, a proposed regulatory framework for AI (Kop, 2021;Edwards, 2022). AI principles and a legal framework were presented in this document for its member states. It outlines its goals as follows: (i) to make AI systems safer and more secure by requiring them to adhere to EU values and relevant legislation on fundamental rights; (ii) to make investments in automated systems easier; (iii) to strengthen responsible AI governance through rules and guidelines; and (iv) to establish a reliable and secure environment for the development of AI systems (Zhao & Gómez Fariñas, 2022; Stahl et al., 2022). The European Commission created a risk-based approach pyramid that classifies risks into four categories: low, moderate, high, and unacceptable. The report revealed that in order for end users to decide whether or not to continue interacting with the machine, it was suggested that they be made aware that they are interacting with AI. Furthermore, following the introduction of AI products to the market, the EU suggested giving public authorities the responsibility of monitoring their advancements. This act requires AI developers to keep evaluating the assurance and quality of AI systems and to carry out risk assessments because they are expected to report any significant incidents or malfunctions in the technology.

### 2.2.2    National AI Strategyof Singapore

The Singaporean government released AI. Verify, an AI Governance Testing Framework and Toolkit, on May 25, 2022, for businesses who wish to demonstrate the accountability and dependability of their AI systems (Infocomm Media Development Authority (IMDA), 2022). Several companies, including Microsoft, Google, and Meta, have already embraced the Singaporean framework to validate their credentials for AI governance. Summarily, the guiding principles recommend that AI systems should prioritize humans and have an explicable, transparent, and equitable mode of operation (Camilleri 2023).

To improve its applicability and usability, the model framework then incorporated other factors like reproducibility and robustness- in line with IBM's AI governance principles. Additionally, according to Singaporean's framework, AI developers and users are to communicate and interact with a variety of stakeholders- consistent with the transparency principles of IBM and Microsoft(Fjeld et al., 2020; Monetary Authority of Singapore, 2019).

### 2.2.3.OECD's AI guidelines

The formulation of comprehensive principles and guidelines for the governance of AI has been greatly aided by the Organization for Economic Co-operation and Development (OECD).The OECD released its AI Principles in response to the need for a globally applicable framework to help industry leaders, policymakers, and other stakeholders navigate the opportunities and challenges posed by AI technologies.

The OECD began promoting its principles, which direct practitioners in the development of creative and reliable AI systems, in May 2019. In all phases of their research and development, practitioners are urged to uphold democratic values and human rights by the OECD's AI principles. Its standards support equitable and human-centered values; robustness, security, and safety; accountability, transparency, and comprehensibility; as well as inclusive and sustainable growth. Consequently, to lower the risks associated with AI systems, the OECD states that all AI actors must make sure that all of their processes are traceable. It suggests that everyone should take responsibility for their actions. Additionally, the OECD has established a standard for open reporting and disclosure of AI processes.

### 2.3. Ethical implications of AI in business

The study by Daza and Ilozumba (2022) identified the most significant publications by conducting an extensive survey of business literature. The following primary ethical issues are identified and grouped into five topic clusters: jobs, employment, and automation; foundational issues; transparency, privacy, and trust; bias, preferences, and justice; and social media, participation, and democracy. The study further revealed that one of the most difficult fundamental ethical problems is autonomy in decision-making. It has long been believed that only rational, authorized humans are capable of assigning ethical responsibility. However,

AI systems are specifically built to function independently in making decisions. The study therefore concluded that further exploration is required on the extent to which moral attribution pertains to AI and whether redefining ethical frameworks in light of AI agency is necessary.

AI ethics, according to Bertoncini & Serafim (2023), should no longer be seen as optional but rather as a fundamental necessity as AI becomes progressively integrated into daily operations. The study suggested investigating important areas relating to moral agency and AI: autonomy, right of explanation, and value alignment. Similarly, (De Cremer and Narayanan (2023) support retaining human accountability in decision-making even as AI develops. Thus, AI can significantly contribute to improving ethical decision-making. Alejo et al., (2023) stated that transparency and bias are two of the foremost ethical issues regarding the use of AI in business. On the one hand, because AI algorithms frequently function as "black boxes," it can be difficult to determine how decisions are made and whether or not to hold them responsible for any biases or mistakes. However, biases in society that are present in the data used to train AI systems are reflected and amplified by these systems.

### III. Governance frameworks and ethical issues affecting the outcomes of AI-driven business decisions

The concept of AI governance is founded on voluntary principles that are meant to direct practitioners in their study, development, and maintenance of AI systems, as well as on formal rules such as binding regulations and legislative acts (Butcher & Beridze, 2019; Gonzalez et al., 2020). In essence, it is a framework for regulations that AI practitioners can use to help them with strategy development and day-to-day operations (Erdélyi & Goldsmith, 2022; Mullins et al., 2021; Schneider et al., 2022). The idea of responsible AI governance is to guarantee that automated systems and technologies, assist individuals and organizations in attaining their long-term goals, in addition to safeguarding the best interest of all stakeholders (Corea et al., 2022; Hickok, 2022).

Business leaders must adhere to all applicable laws, rules, and regulations to practice AI governance (Mäntymäki et al., 2022). Additionally, they must adhere to moral principles, values, and standards (Koniakou, 2023). To overcome obstacles, minimize uncertainties, risks, and any unfavourable outcomes such as reduced human oversight in decision-making, among others, practitioners should be dependable, conscientious, and accountable in how they handle their intellectual capital and other resources, including their information technologies, finances, and staff members (Agbese et al., 2023; Smuha, 2019).It is essential to have procedural governance mechanisms in place to guarantee that AI technologies are used responsibly. A few of the essential components needed for the responsible governance of AI are shown in *Figure 1*.
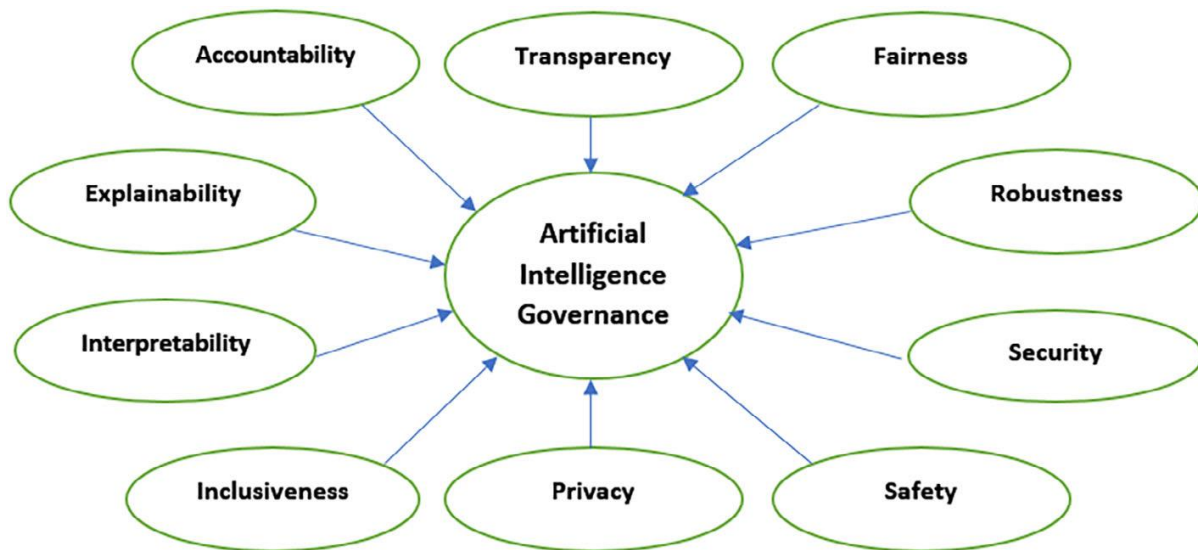


Figure 1. Components for AI governance(Camilleri 2023)

#### 3.1. User safety and privacy

User concerns regarding the privacy of their data are growing mainly because workers in business settings are entitled to decide who can access their data (Zirar et al., 2023). According to the reports of Wu et al., (2021) and Zhu et al., (2020), individuals' privacy would be violated if third parties collected or used their data without their permission or voluntary agreement. Large amounts of customer data are being collected and stored by AI-enabled products, which include chatbots and virtual assistants, digital assistants, wearable technology, and dialogue systems. Numerous obstacles could outweigh the advantages that these

interactive technologies are bringing.According to Rodríguez-Barroso et al. (2020), the technology companies that created these products bear the responsibility of safeguarding the personal information of their users. In this regard, users frequently do not realize that they are disclosing personal information in the form of text, images, sounds, words, and other senses.

Facial recognition technologies, for instance, are being employed in business situations. individuals can use them to securely access websites and social media, as well as to authorize payments through banking and financial services apps. These kinds of systems can be used by employers to keep tabs on and record their workers' attendance. Furthermore, (Camilleri 2023) revealed that these technologies allow organizational marketers to target specific customers with digital advertisements. They can be used by security agencies for criminal investigation and surveillance purposes. The use of these technologies has frequently sparked worries about security and privacy issues. Organizations are required by several data privacy laws that have been passed in various jurisdictions to notify users when they are collecting and storing biometric data. Consequently, businesses using these technologies are not allowed to use customer data without permission.

Furthermore, businesses must inform their target audiences about their data privacy policies (Wong, 2020). They must reassure customers that the information they obtain with their consent is secure and that their information may be used to enhance the personalized services they provide. Therefore, preventive policies and procedures pertaining to data monitoring and control ought to be in place for AI developers. To guard against cyberattacks, they should invest in security technologies like firewalls, access control systems, and authentication and/or encryption software. Regular testing can reduce the likelihood of incidents, raise security standards, and protect data.

### 3.2. Equity and inclusivity

The fairness dimension of responsible AI pertains to the efforts made by practitioners to rectify algorithmic biases that could potentially be incorporated into their automation processes, either voluntarily or involuntarily (Bellamy et al., 2019; Mäntymäki et al., 2022). Developer biases, such as prejudices or sympathies towards particular demographic characteristics like genders, age groups, and ethnicities, among others, can have an impact on AI systems (Madaio et al., 2020). Nonetheless, several multinational firms have recently created tools designed to identify bias and minimize it to the greatest extent possible (John-Mathews et al., 2022). AI systems frequently pick up new skills from the data that is provided to them. Inappropriate outputs could arise from skewed data or data that contains implicit bias.

### 3.3. Transparency and accountability

Accountability pertains to the expectations of stakeholders regarding the appropriate operation of AI systems throughout their lifecycle, encompassing design, development, testing, and implementation, all while adhering to applicable regulatory frameworks (Camilleri 2023). According to Raji et al. (2020), AI developers must take responsibility for the seamless functioning of AI systems throughout their entire lifecycle. By maintaining a record of their AI development procedures, stakeholders expect them to be accountable (Mäntymäki et al., 2022). The level of understanding of algorithmic models or the ability to comprehend how AI functions, or the ability to understand how individual components function, and algorithmic transparency, or the visibility of the algorithms, are all related to AI transparency (Andradaet al., 2022; Hollanek, 2020).

## IV. Conclusion

Summarily, the review suggests that an increasing number of industry professionals are focusing on AI, and leveraging its potential possible applications, and advantages. It also provides a thorough framework for comprehending the governance concerns and ethical ramifications of AI in business decisions, by setting the stage for the later sections of the paper and adding to the current academic discourse about the responsible application of AI in important business decision-making processes. In addition, it revealed that AI systems have possible dangers alongside the beneficial advantages (Berente et al., 2021; Zhang & Lu, 2021).

Emerging technologies such as AI have presented ethical challenges, and the management of these technologies has undergone modifications to the governance of AI in business decisions over the years. Over time, an increasingly morally elevated paradigm has replaced the previous one in governance.In light of this, research on privacy and ethics in AI emphasizes how critical it is to take these concerns into account when developing and deploying AI technology. Therefore, the insights and conclusions emphasize the challenges of preserving privacy in a time when data is convergent.A wide range of privacy issues concerning governance in AI applications are also revealed by the review of the literature, ethical standards, research articles, and regulatory frameworks.It is clear that a thorough and flexible ethical framework is necessary given the issues of algorithmic bias, data collection, and the effects of AI-driven analysisrelated to the application of AI in making important business choices.Maintaining ethical standards in the application of AI requires cooperation amongst developers, policymakers, and end-users, which will

enhance corporate decision-making procedures. Thus, it is recommended that to agree on AI ethical principles, governments, foundations, and businesses should collaborate across disciplines, sectors, and international boundaries. Additionally, for experts from various disciplines to collaborate in addressing the ethical challenges of AI, clearly defined moral scenarios involving AI that have a significant social impact should be identified. Finally, to keep up with the swift advancement of AI, there is a need to enhance collaborative development and research of AI governance technologies.

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