

# Ethical Issues Regarding the Use of Artificial Intelligence in Business Enterprises

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## ABSTRACT

Artificial intelligence (AI) has become a transformative force in modern business by automating processes, enhancing decision-making, and accelerating innovation. Despite its benefits—such as increased productivity, improved customer service, and cost reduction—the rapid adoption of AI has intensified ethical concerns related to data privacy, fairness, transparency, accountability, and social responsibility. Consequently, AI ethics has shifted from a theoretical debate to a strategic and practical necessity for organizations. This study examines key ethical challenges associated with AI use in business and proposes a comprehensive, multilayered governance model for ethical AI. Based on an extensive interdisciplinary literature review, the study identifies critical issues including data security risks, algorithmic bias, limited explainability, unclear accountability, surveillance concerns, misinformation, workforce displacement, cybersecurity threats, and regulatory gaps. The findings suggest that unethical AI deployment can create significant legal, reputational, and social risks, whereas ethically governed AI enhances decision quality, stakeholder trust, and long-term sustainability. To address these challenges, the study introduces a Multilayered Ethical AI Governance Model spanning business, corporate, national, global, and AI system levels, emphasizing integrated governance beyond purely technical solutions.

**Keywords:** Artificial Intelligence, Business, Management, Business Ethics

## INTRODUCTION

With the acceleration of the digital transformation process, artificial intelligence (AI) technologies have assumed a decisive role in many areas of contemporary business, ranging from strategic decision-making processes to operational activities. AI-based applications such as machine learning, natural language processing, big data analytics, and automation offer significant advantages to organizations, including increased efficiency, cost reduction, enhanced customer experience, and the development of innovative business models. This rapid diffusion has transformed AI from a purely technical tool into a strategic organizational asset with managerial, societal, and ethical dimensions.

Nevertheless, the growing adoption of AI in business contexts also brings about substantial ethical risks, including algorithmic bias, data privacy violations, lack of transparency, accountability challenges, and potential adverse effects on employment. The integration of AI systems into decision-making processes raises fundamental ethical questions regarding how decisions are generated, who is affected by these decisions, and who bears responsibility for their outcomes. In particular, the widespread use of so-called “black-box” algorithms intensifies concerns related to trust among both managers and stakeholders. In this regard, ethical concerns surrounding the use of AI in organizations constitute not merely a technical issue, but a multidimensional problem that must be addressed from the perspectives of governance, leadership, and corporate responsibility.

A review of the existing literature indicates that research on artificial intelligence has largely concentrated on two main streams. The first stream focuses on the technical impacts of AI across various industries, examining process optimization and performance enhancement. The second stream emphasizes the normative and principled dimensions of AI ethics, aiming to develop regulatory frameworks and ethical guidelines. However,

a significant portion of this literature provides limited practical guidance on how AI ethics can be effectively integrated into organizational practices and how ethical principles can be operationalized in real-world business settings. In other words, while discussions on AI ethics are conceptually robust, they are often insufficiently reflected in the everyday decision-making and implementation processes of organizations.

In recent years, ethical principles and guidelines issued by institutions such as the IEEE, the European Union High-Level Expert Group on AI, and the AI Now Institute have offered important frameworks for the development and deployment of trustworthy and responsible AI systems. Nonetheless, how these principles can be translated into managerial structures, organizational roles, and leadership practices within business contexts remains unclear. This gap highlights the need to reconceptualize ethical leadership and corporate governance in the age of AI. Ethical leadership in this context extends beyond mere regulatory compliance to encompass broader responsibilities, including fairness, transparency, inclusiveness, and alignment with societal values.

Against this backdrop, a systematic and holistic examination of ethical issues related to the use of AI in organizations is of critical importance. Organizations can only harness the benefits of AI while proactively managing its ethical risks by adopting robust ethical frameworks grounded in interdisciplinary collaboration and active stakeholder engagement. Accordingly, this study aims to identify the ethical concerns and challenges associated with the use of AI in business settings and to examine best practices for mitigating these ethical risks, thereby addressing a significant gap in the existing literature. In doing so, the study seeks to offer valuable insights for both academic researchers and practitioners.

For this purpose, the theoretical and practical studies and applications that literature review related with this issue has studied in this article. And the following main questions are addressed:

- 1) For what purposes is AI used in businesses (especially SMEs)?
- 2) What are the concerns of businesses regarding the integration of AI into their processes?
- 3) What issues related to AI are addressed in business ethics practices and research?
- 4) What are the current studies/practices that regarding regulations, standards, and codes related to AI ethics?

## CONCEPTS AND THEORETICAL BACKGROUND

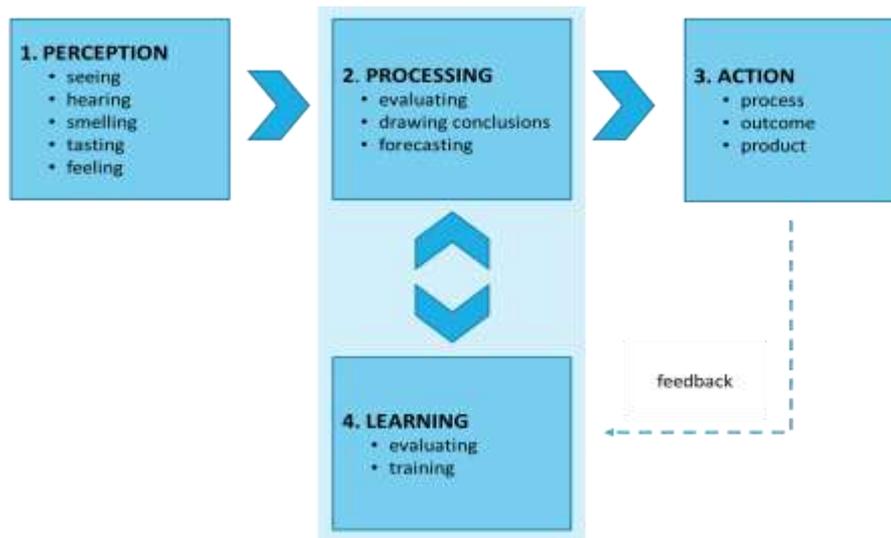
### Artificial Intelligence

*"Intelligence is the ability to adapt to change"* - Stephen Hawking

Intelligence is generally a concept associated with humans. People are considered intelligent (smart, possessing a high level of intelligence) when they act in ways that produce results, think beyond routines (habits, standards), and generally perform tasks or solve problems that others find difficult. However, advancements in technology have made it possible to create machines that solve problems flawlessly, efficiently, and productively, giving rise to the concept of Artificial Intelligence (AI). AI is the combination of ICT tools, devices, software, and processes that can mimic human levels of intelligence; it enables machines to perform tasks that have, until now, been carried out by humans, who are regarded as intellectual beings. Supporting this idea, Arakpogun et al. (2021) argue that AI is a collection of ICTs that imitate the human mind. It allows machines to perform cognitive functions that were previously associated only with human minds (Rai, Constantinides, and Sarker, 2019). According to the Merriam-Webster dictionary [2005], artificial intelligence is defined as “a branch of computer science concerned with the simulation of intelligent behavior” and “the ability of a machine to imitate intelligent human behavior.” In other words, artificial intelligence is the simulation of human intelligence processes by machines, particularly computer systems. These processes include learning (acquiring data and the rules for using it), reasoning (using rules to reach approximate or definite conclusions), and self-correction (adjusting or correcting errors and malfunctions on its own initiative). Artificial intelligence pertains to many sciences, ranging from computing, mathematics, and data to psychology, philosophy, and linguistics (Palanca-Castan, et. al., 2021).

Artificial intelligence allows computers to independently solve abstract tasks and problems that require human-level intelligence (Russell & Norvig, 2020). Its unique feature is that, unlike classical software, AI does not rely on a fixed, pre-programmed solution path. Instead, independent learning algorithms are used to analyze and interpret data autonomously and make decisions based on it (Sengar et al., 2024). These are called learning

systems, because AI is capable of learning empirical knowledge and applying it to new situations (Russell & Norvig, 2020; Chakraborty et al., 2023). Examples include machine translation, chatbots (Chakraborty et al., 2023), image recognition (AI Watch, 2020), and voice assistants in smart homes (Mayer, 2019; Samoili, et. al., 2020).



**Figure 1.** Functions of Artificial Intelligence (AI)

The “Competence Center for Artificial Intelligence” (2020) emphasizes that the term artificial intelligence encompasses a variety of technologies that can be used for different purposes. Possible operational models are divided into four overlapping areas: (1) Information is received from the environment (*perception*). This is done in a way similar to human senses such as reading, watching, feeling, hearing, speaking, smelling, and tasting. (2) In the next stage, the information, which is converted into electronic data, is processed (*processing*), evaluated, and conclusions are drawn. (3) Based on this, AI can perform various possible actions depending on the information (*action*). (4) With each processing operation, artificial intelligence can expand its “experiential knowledge” and *learn* to process information better in the future.

### Objectives of Using Artificial Intelligence in Business Enterprises

The application of artificial intelligence (AI) in the modern business environment has fundamentally changed business models, decision-making mechanisms, and competitive strategies of enterprises. Especially for small and medium-sized enterprises (SMEs), AI technologies are increasingly used to create more flexible, data-driven, and effective management capabilities despite limited financial and human resources (Tariq et al., 2024).

The literature review shows that the use of AI in business enterprises mainly focuses on strategic, operational, functional, and customer-oriented goals, including predictive decision-making, process optimization, and customer relationship management (Ahmad et al., 2025; Le Dinh, et al., 2025). The primary purpose of using AI is to *support strategic decision-making*. AI tools provide managers with analytical support in processes such as analyzing market trends, monitoring the competitive environment, scenario planning, and forecasting risks. By processing large volumes of unstructured data, AI facilitates the comparison of strategic alternatives and enables more well-founded decision-making (Vudugula et al., 2023; Iqbal, 2025). These features are particularly important for SMEs, as they are usually not equipped with extensive analytical teams and resources. The second important objective is to *increase operational efficiency and automate processes* (Liao, Liang, & Ye, 2025). Enterprises use AI to automate repetitive and time-consuming tasks in daily business operations. For example, in areas such as document processing, data entry, accounting, cost analysis, and supply chain optimization, AI reduces operational costs and prevents human errors (Machucho, Mutshewa, & Mwale, 2025). This not only increases productivity for SMEs but also allows them to focus on their core business activities. The third area of use is *the improvement of customer relations and personalized services* (Ledro, Ghezzi, & Balocco, 2025). AI-based analytics and machine learning tools enable a more precise understanding of customer behaviors, preferences, and expectations. Based on this information, personalized marketing campaigns, recommendation systems, chatbots, and customer support solutions are developed. As a result, enterprises enhance customer

satisfaction and loyalty, gaining a stronger position in the market (Ledro et al., 2025). The fourth objective is the formation of innovation and new business models. In particular, generative artificial intelligence (Generative AI) creates new opportunities in areas such as product design, service innovations, content creation, and strategic planning (Lakshman, 2023). For SMEs, these technologies enable the development of innovative solutions without requiring large investments and help them gain a competitive advantage by driving AI-driven business model innovation (Venable, V., et al., 2024). Finally, another important objective of using AI is *to strengthen knowledge management and organizational learning* (Taherdoost & Madanchian, 2023). Artificial intelligence supports the organization by systematizing internal information, uncovering tacit knowledge, analyzing employee performance, and forming a continuous learning environment (Nakash & Bolisani, 2025). In the long term, this increases the resilience and adaptability of the enterprise.

Overall, the literature shows that artificial intelligence in business enterprises is used not only as a technological tool but also as a multifaceted instrument that strengthens strategic management, creates competitive advantage, and supports sustainable development. In particular, for SMEs, the purposeful and phased use of AI allows them to compensate for their limited resources and operate more effectively and innovatively.

### **Business Ethics**

In the context of the modern market economy, the success of business enterprises is measured not only by financial results but also by their responsible behavior toward society, employees, partners, and the environment (Belas, Balcerzak, Dvorsky, Hotkova, & Bencsik, 2025). In this regard, the concept of business ethics is becoming increasingly important. Business ethics implies the application of values such as honesty, fairness, transparency, and social responsibility in the activities of enterprises and is considered one of the key conditions for long-term sustainable development (Miko, 2025).

The nature of business ethics is the set of moral norms and principles that direct the decisions and behaviors of business entities (Iqra, Ispahan & Tahir, 2025). It highlights not only that an enterprise should earn profit but also how that profit is obtained (Iqra et al., 2025). Unlike legal norms, business ethics relies more on conscience, corporate culture, and social expectations rather than coercive mechanisms. In this sense, ethical behavior is a broader concept than mere compliance with the law and often covers areas that legislation has not yet regulated (Bahar, 2025).

There are a number of internal and external factors that drive business enterprises toward ethical behavior (Abu Arrah, Caglar, & Bayram, 2018). External factors include societal expectations, consumer behavior, the competitive environment, government regulations, and international standards. Modern consumers may boycott companies that engage in unethical activities, which can cause serious harm to brand image and market share (Jedicke et al., 2025). Internal factors, on the other hand, are related to corporate culture, leadership values, the enterprise's mission and vision, and human resource management policies. In particular, the importance that top management places on ethical behavior and its exemplary role directly influences employee behavior. In enterprises where an ethical environment has been established, employee satisfaction and loyalty are also higher (Abu Arrah et al., 2018).

Business ethics performs a number of important functions (Ferrell, Fraedrich, & Ferrell, 2022). Through the regulatory function, the behavioral boundaries of business entities are defined, and unacceptable actions are prevented. The integrative function creates unity and trust among employees based on ethical values (Crane & Matten, 2021). The image and reputation-forming function enables the enterprise to be recognized as a reliable partner in the market. In addition, business ethics plays an important role in reducing risks and ensuring long-term strategic stability. The main principles of business ethics include honesty, fairness, responsibility, transparency, respect, and compliance with laws. According to the principle of honesty, the enterprise should behave truthfully and openly in all relationships. Fairness implies equal treatment of employees, customers, and partners. The responsibility principle requires awareness of the social, economic, and environmental consequences of decisions. Transparency emphasizes the non-concealment of information and accountability.

Business ethics plays an important role in the application of ethical codes and international standards that guide organisational conduct (Voegtlin & Pless, 2014). Ethical codes systematise the rules of conduct adopted within the enterprise and serve as a roadmap for employees. At the international level, standards such as ISO 26000 and

the UN Global Compact provide a general framework for social responsibility and ethical behaviour, helping firms align with recognised global CSR principles (Orzes, 2018; Rasche & Waddock, 2013). These regulators help ensure that business activities comply with global ethical norms. At the same time, effective management of business ethics is closely related to the concept of ethical leadership. Ethical leaders set an example through their personal behaviour, promote open communication, and strive for the fair resolution of ethical dilemmas (Al Halbusi, Ruiz-Palomino, & Williams, 2023). Ethical leadership contributes to organisational sustainability and performance, and it is not limited to applying rules but also involves the creation of a culture of values-based decision-making. The establishment of ethics committees, the organisation of ethics training, and anonymous reporting mechanisms are among the main tools in this process.

Measuring business ethics is a complex but important process. To this end, ethics audits, internal control mechanisms, and employee and customer surveys are applied to assess how well ethical practices are functioning within organisations. Ethics audits help evaluate whether a company has fulfilled its ethical, legal, and social responsibilities by comparing declared principles with actual practices, which increases transparency and stakeholder trust (Ojasoo, 2016). Accountability ensures that the results of a company's ethical activities are shared with stakeholders, reinforcing responsible behaviour and ethical governance (Ojasoo, 2016; Bag et al., 2022). Sustainability and social responsibility reporting are widely used to measure and disclose ethical indicators to the public, thereby enhancing transparency and strengthening public trust in corporate conduct (Ojasoo, 2016; Nicolăescu et al., 2015).

In conclusion, business ethics is an integral part of the management system of modern enterprises. Activities based on ethical principles are not only an indicator of social responsibility but also a guarantee of competitive advantage and long-term success. Proper management and continuous measurement of business ethics allow enterprises to create both economic and social value. The use of artificial intelligence (AI) in business also draws attention to related ethical issues. AI is employed in businesses for collecting, processing, and interpreting data, making decisions, managing various operational processes, as well as for daily technical and strategic purposes ranging from engaging customers to identifying new investment opportunities. The key question here is: what concerns do businesses face when using AI? More generally, how is the ethical use of AI regulated for management across all stakeholders within the framework of corporate governance? What information and findings does the existing literature and practice provide on this matter?

## METHOD

The present study employs a literature review as the primary research method to examine ethical issues related to the use of artificial intelligence (AI) in business enterprises. Relevant academic articles, books, reports, and policy documents were systematically collected from databases such as Scopus, Web of Science, Google Scholar, and ScienceDirect. The review focuses on both theoretical frameworks and empirical studies to provide a comprehensive understanding of ethical concerns in AI adoption and use. Selected studies were critically analysed to identify common themes, challenges, and recommendations for ethical AI governance in business contexts. This method allows for synthesising existing knowledge, identifying research gaps, and providing evidence-based insights to inform ethical decision-making in AI implementation within enterprises.

## RESULTS

Artificial intelligence (AI) plays an important role in the modern business environment in terms of automating processes, improving decision-making, and accelerating innovation (Maiti, Kayal, & Vujko, 2025). Advantages such as improved customer service, reduced operational costs, and increased productivity make AI attractive for businesses. However, the rapid spread of AI technologies has also made their use within an ethical framework a pressing issue (Maiti et al., 2025; Zainol et al., 2025). In this regard, AI ethics is no longer just a theoretical concept but has become a strategic and practical necessity for all businesses using AI technologies (Olatoye et al., 2024). According Batool, Zowghi, & Bano (2023), AI ethics encompasses the set of moral principles and behavioural norms that are observed when developing, deploying, and using AI systems. This concept focuses not only on efficiency but also on the impact of AI on human rights, society, and the environment, ensuring that AI serves human interests, causes no harm, and aligns with social values (Maiti et al., 2025; Batool et al., 2023).

The importance of AI ethics has been highlighted in the literature, with multiple studies demonstrating that, if not properly regulated, artificial intelligence can generate serious social, legal, and reputational risks (Khan et al., 2021). Previous research has found that biased algorithms can lead to unfair decisions, discrimination, and erosion of customer trust (Bahangulu & Owusu-Berko, 2025). Empirical and conceptual studies across sectors such as finance, healthcare, and social media indicate that irresponsible AI use can negatively influence human behaviour and exacerbate psychological and social problems (Batool, Zowghi & Bano, 2023). Other studies report that non-compliance with international data protection regulations, including GDPR, exposes businesses to significant legal liabilities (Radanliev, 2025). Conversely, research shows that ethical AI applications can enhance decision-making quality, improve customer experience, and support long-term business success (Gunasekara et al., 2025). The literature identifies several fundamental principles of AI ethics: fairness, ensuring all individuals and groups are treated equally and free from bias; transparency, making AI processes and decision-making clear to stakeholders; and accountability, holding AI systems responsible for their outcomes while preserving human oversight (Khan et al., 2021; Batool et al., 2023). Furthermore, UNESCO's guidelines and recent studies suggest that these principles should be integrated with a human-rights-based approach, alignment with sustainable development goals, and effective governance mechanisms to ensure AI respects human dignity, societal values, and environmental sustainability (UNESCO, 2022).

As a result, AI ethics is a key framework that enables businesses to balance technological advancement with social responsibility (Laine, Minkkinen & Mäntymäki, 2024). The use of AI based on ethical principles not only helps prevent risks but also enables the technology to create real value for both society and business, as identified in studies analysing responsible AI governance and organisational practices (Batool, Zowghi & Bano, 2023).

### **Key Ethical Issues Related to Artificial Intelligence in Business Organizations**

As artificial intelligence becomes more integrated into business processes, various ethical issues must be considered to ensure that people use AI systems responsibly. These issues particularly relate to the following challenges or shortcomings:

**Data confidentiality and security concerns;** AI systems often rely on large data sets that may contain sensitive personal information, leading to significant data confidentiality and security concerns in business organisations (Radanliev & Santos, 2023). This raises concerns about data security and privacy, as empirical research shows that poorly governed AI data practices can undermine consumer trust and expose organisations to ethical and legal risks (Saura, Škare & Ozretić Došen, 2024). Businesses need to ensure that AI systems comply with data protection regulations like GDPR to protect users' personal information from misuse or breaches. An example is the use of AI in marketing, where customer data is analysed to personalise advertisements. While this can improve the customer experience, it also requires careful handling of personal data to prevent privacy breaches and ethical violations (Saura et al., 2024).

**Fairness concerns;** AI systems are only as good as the data they are trained on, and empirical research shows that when training data contains bias, AI can perpetuate those biases and lead to unfair outcomes in organisational decision-making (Mittelstadt, 2020). For example, an AI system used in recruitment may favour certain demographic groups over others if it is trained on biased data, as demonstrated in studies examining business analytics systems (Buss & Ly, 2022). Fairness in AI decision-making is important for maintaining trust with customers and stakeholders, particularly in market, hiring, and service delivery contexts (Mittelstadt, 2020, Hanna et al., 2024). Organisations should actively work to identify and reduce AI biases to avoid discriminatory practices and ensure equitable treatment, since failure to do so can create legal, reputational, and operational risks (Buss & Ly, 2022).

**Transparency and Accountability in AI Systems;** A major ethical challenge in AI is that many models operate as opaque "black boxes," so stakeholders cannot easily understand the basis for specific outcomes (Saeed & Omlin, 2023). This opacity can erode confidence in AI, particularly when decisions affect critical areas like lending or workforce selection, as explained in studies on explainable AI in enterprise analytics (Madabhushini, 2025). Research on *explainable and accountable AI* (XAI) promotes greater transparency by enabling users to interpret and question AI decisions (Cheong, 2024). Developing systems that provide clear explanations for their outputs is essential for fostering trust and supporting accountability in organisational settings (Saeed & Omlin, 2023; Cheong, 2024).

**Responsibility;** When an artificial intelligence (AI) system makes a mistake, the question of who bears responsibility becomes ethically significant — especially in business contexts where decisions can affect customers, employees, and society at large. Responsibility and accountability are distinct yet interconnected concepts: accountability refers to formal systems that require organizations to justify AI outcomes, while responsibility is about ethical duties held by developers, deployers, and users of AI systems (Fleisher et al., 2025). For businesses, clear accountability frameworks mean establishing which human actors or teams are answerable when an AI system produces an error — ensuring there is always a path to explain, correct, and prevent harm. Organizations must implement governance structures that integrate ethical rules into the entire AI lifecycle, from design and testing to deployment and monitoring. Continuous human oversight is essential, not only for compliance but also for maintaining public trust. According Vacek (2025) ethical AI requires careful definition of roles and responsibilities among all stakeholders involved in AI development and application, including developers, manufacturers, deployers, and business leaders.

**Interception of confidential information by others;** Artificial intelligence depends on massive data collection from sources like social media, phones, and connected devices to train machine learning algorithms, but this pervasive data harvesting can create detailed personal profiles without meaningful user consent, raising significant ethical and privacy concerns. AI systems not only compile every click, view, and search, but can also infer sensitive traits or behaviors that users did not explicitly disclose, such as health indicators or personal preferences, which can then influence decisions in areas like employment or targeted advertising — a practice that has been identified as a key ethical challenge in AI governance and privacy protection (Barthwal et al., 2025) AI's ability to integrate with other technologies such as facial recognition further amplifies privacy risks by enabling pervasive surveillance that many individuals would find intrusive, creating tensions between technological benefits and individual rights (Arya et al., 2025). Moreover, the use of such personal data without transparent consent mechanisms and adequate regulatory oversight raises fundamental questions about fairness and autonomy, underscoring the need for ethical AI frameworks that emphasize privacy-preserving data practices and meaningful user control.

**The potential (or reality) of being used for manipulation or deception;** Artificial intelligence's ability to analyse vast digital footprints raises serious ethical concerns about manipulation and deception, particularly when such capabilities are used unethically to spread disinformation, influence political views, and exploit individual vulnerabilities; by detecting patterns in personal data, AI can tailor highly persuasive content that compromises decision-making autonomy and amplifies societal polarization, as seen in cases where generative AI produces deepfake videos and fabricated news to manipulate public opinion and destabilize democratic processes — a risk that demands rigorous ethical scrutiny and governance in both technology design and business deployment. This aligns with scholarly findings on the ethical challenges and best practices for AI adoption in business (Maiti et al., 2025), frameworks for understanding manipulation risks in generative systems (Klenk, 2024), and analyses of AI's dual role in information dissemination and its potential to generate misinformation (Germani, Spitale and Biller-Andorno, 2024).

In addition to the concerns listed above, ethical challenges related to the use of artificial intelligence (AI) also in these issues in business continue to intensify. These include reduced human oversight, as fully automated decision-making systems can marginalize human judgment and weaken accountability and autonomy within organizational processes (Cheong, 2024). Another significant issue is job displacement and social impacts, since AI-driven automation in recruitment, performance evaluation, and task allocation may increase unemployment risks and exacerbate social inequality, particularly in algorithmic human resource management (Capasso et al., 2024). Moreover, cybersecurity risks remain a growing ethical concern, as AI systems can themselves become targets of adversarial attacks, data manipulation, and malicious exploitation, raising questions about responsibility, transparency, and trust in AI-enabled security operations (Cadet et al., 2024). Finally, ethical and legal compliance challenges persist, because the rapid pace of AI innovation frequently outstrips existing national and international regulatory frameworks, making effective governance, accountability, and ethical alignment difficult to achieve in business environments (Radanliev, 2025; Cheong, 2024).

Word map (Figure 2.) of the findings of literature review illustrates the core ethical issues surrounding the use of artificial intelligence in business enterprises, emphasizing how AI adoption intersects with fairness, transparency, accountability, and human rights. It highlights critical concerns such as data privacy, bias, discrimination, cybersecurity, legal risks, and job displacement, while also stressing the importance of

governance, human oversight, explainability, and regulatory compliance (e.g., GDPR). Overall, the map reflects a human-centric and responsible AI approach, underscoring that ethical AI in business is essential for building trust, ensuring social sustainability, and minimizing negative societal and organizational impacts.

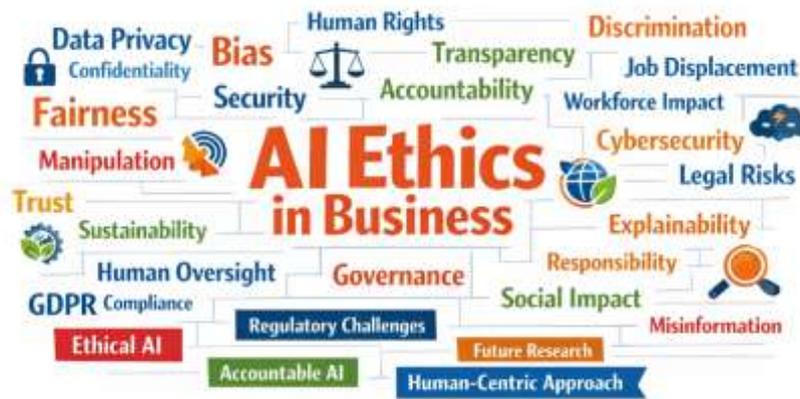


Figure 2. Key word map of findings

## CONCLUSION

This study demonstrates that while artificial intelligence offers substantial opportunities for business value creation, its ethical implications are equally significant and cannot be overlooked. The results show that ethical challenges related to data privacy, fairness, transparency, accountability, responsibility, manipulation, workforce impacts, cybersecurity, and regulatory compliance are deeply intertwined with how AI systems are designed, deployed, and governed in business organizations.

The findings reinforce the view that AI ethics should be understood as a strategic framework rather than a compliance checklist. Businesses that integrate ethical principles such as fairness, transparency, accountability, and human oversight into their AI governance structures are better positioned to mitigate risks, build stakeholder trust, and achieve sustainable long-term performance. Conversely, neglecting ethical considerations exposes organizations to legal liabilities, reputational damage, and social harm.

From a practical perspective, the study highlights the need for organizations to adopt comprehensive AI governance mechanisms, including clear accountability structures, explainable AI practices, privacy-preserving data management, and continuous human oversight. Policymakers and regulators should also work to close the gap between rapid technological innovation and existing legal frameworks to ensure responsible AI deployment.

Finally, this research underscores the importance of future studies that empirically examine the effectiveness of ethical AI governance models across industries and cultural contexts. As AI technologies continue to evolve, maintaining alignment between technological progress, ethical responsibility, and societal values will remain a critical challenge for both businesses and society.

## RECOMMENDATION AND CONTRIBUTIONS

### Managerial Implications

The findings of this study offer several practical implications for managers and business leaders implementing artificial intelligence systems. First, organizations should establish robust AI governance frameworks that clearly define roles, responsibilities, and accountability across the entire AI lifecycle—from data collection and model development to deployment and monitoring. Embedding ethical review processes and ethics committees within organizations can help ensure that AI systems align with corporate values and regulatory requirements. Second, managers should prioritize human-in-the-loop decision-making, particularly in high-stakes business contexts such as hiring, credit scoring, and customer profiling. Maintaining human oversight not only reduces ethical risks but also enhances trust, transparency, and accountability in AI-supported decisions. Investing in explainable AI (XAI) tools can further support managerial understanding and facilitate responsible decision-making. Third, organizations must strengthen data governance and cybersecurity practices. This includes adopting privacy-by-design principles, ensuring compliance with data protection regulations (e.g., GDPR), and implementing

continuous risk assessments to prevent data breaches and model manipulation. Managers should also promote ethical data use policies that limit excessive data collection and discourage manipulative practices in marketing and customer engagement.

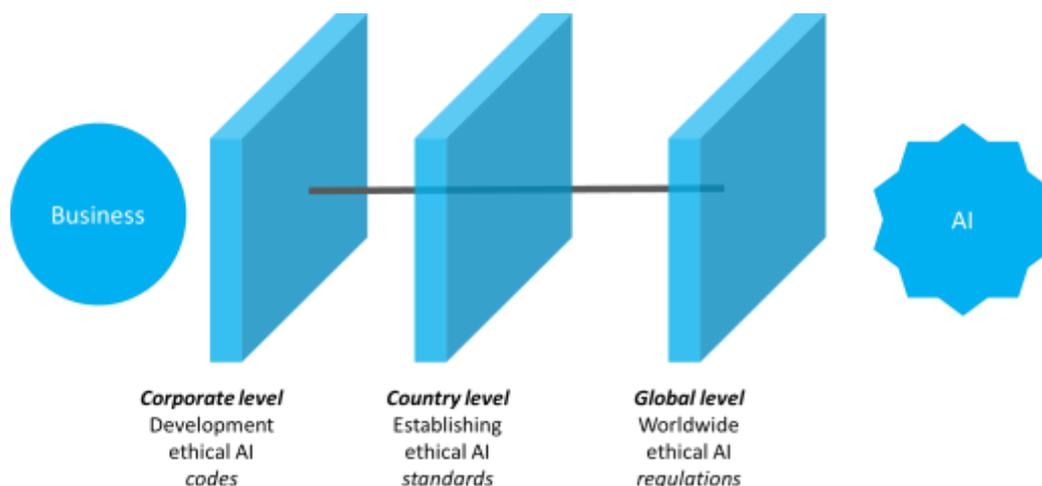
Finally, business leaders should proactively address the social impacts of AI, particularly workforce displacement. Investing in employee reskilling, upskilling programs, and transparent communication about AI adoption strategies can mitigate negative social consequences and support long-term organizational sustainability.

### Theoretical Contributions

This study contributes to the growing body of literature on AI ethics in business by synthesizing ethical challenges across technical, organizational, and societal dimensions. It extends existing theoretical frameworks by demonstrating that ethical AI cannot be adequately addressed through technical solutions alone but requires integrated governance structures, organizational culture, and regulatory alignment. Furthermore, the study reinforces the conceptual distinction between accountability and responsibility in AI-driven decision-making, highlighting the need for multi-stakeholder responsibility models that involve developers, managers, and institutional actors. By linking ethical principles such as fairness, transparency, and human oversight with practical business outcomes, this research bridges the gap between normative ethical theory and applied business ethics. Additionally, the findings support a human-centered and rights-based approach to AI governance, aligning business ethics research with broader theoretical discussions on sustainability, trust, and social legitimacy in digital transformation.

### A Multilayered Model for the Ethical Use of Artificial Intelligence in Businesses

The proposed model (Figure 3) conceptualizes the establishment of Ethical Artificial Intelligence (AI) as a progressive, multi-level governance process that evolves from organizational practices to global alignment. Rather than treating AI ethics as a purely technical issue, the model emphasizes institutional integration, regulatory harmonization, and standardization across different levels of decision-making.



**Figure 3.** Multilayered Model for Using Artificial Intelligence Ethically in Businesses (Proposed model by authors of this article)

At the business level, organizations initiate ethical AI adoption by recognizing ethical responsibility as a core strategic concern. At this stage, ethical considerations are embedded into business objectives, risk assessments, and innovation strategies. Firms acknowledge the societal impact of AI systems and commit to responsible use as a prerequisite for sustainable value creation.

The corporate level represents the internal formalization of ethical commitments through the development and implementation of Ethical AI codes. These codes typically address principles such as transparency, fairness, accountability, data privacy, and human oversight. Corporate governance mechanisms - such as ethics committees, internal audits, and compliance units - ensure that AI systems are designed, deployed, and monitored

in line with these ethical guidelines. This level transforms ethical intentions into operational rules and organizational routines.

At the country level, ethical AI practices are reinforced through national standards, regulations, and policy frameworks. Governments and regulatory bodies translate ethical principles into enforceable norms by introducing AI-related laws, national AI strategies, and technical standards. This level ensures consistency across organizations operating within the same jurisdiction and reduces ethical fragmentation by providing a shared regulatory baseline.

The global level extends ethical AI governance beyond national boundaries by promoting international standards and cooperative frameworks (as governance). Global institutions, standard-setting bodies, and multinational agreements play a critical role in harmonizing ethical AI practices across countries. This level is particularly important given the transnational nature of AI technologies, data flows, and digital platforms. Global standards help mitigate regulatory gaps and support responsible AI deployment worldwide.

Finally, at the AI system level, ethical principles, standards, and regulations are operationalized within the technical architecture of AI itself. This includes embedding ethical requirements into algorithm design, data governance processes, model training, monitoring systems, and lifecycle management. Ethical AI thus becomes not only a policy objective but also a measurable and enforceable feature of AI systems.

Overall, the model demonstrates that ethical AI cannot be achieved in isolation at a single level. Instead, it requires coordinated action across business, corporate, national, and global levels to ensure that AI technologies are developed and used in a manner that is trustworthy, responsible, and socially sustainable.

In the process of creating an effective model for the ethical use of AI, businesses should examine their stakeholders, establish active communication systems with them, and ensure their participation in decision-making during the setup and development processes.

### Directions for Future Empirical Studies

Future empirical research should examine how ethical AI governance frameworks are implemented in practice across different industries, organizational sizes, and cultural contexts. Comparative studies could provide valuable insights into sector-specific ethical risks and best practices, particularly in high-impact areas such as finance, healthcare, and human resource management. Longitudinal studies are also needed to assess the long-term effects of ethical AI adoption on organizational performance, employee wellbeing, customer trust, and social outcomes. Such research would help clarify whether ethical AI practices generate measurable competitive advantages over time. Moreover, future studies should empirically investigate stakeholder perceptions of AI ethics, including how employees, customers, and regulators interpret transparency, fairness, and accountability in AI-driven decisions. Experimental and mixed-methods approaches could further explore how explainability, human oversight, and regulatory interventions influence trust and acceptance of AI systems. Finally, as generative AI and autonomous systems continue to evolve, empirical research should focus on emerging ethical challenges related to manipulation, misinformation, and reduced human agency, providing evidence-based guidance for policymakers and business leaders alike.

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