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Business Decision-Making: The Concept of the Ethical Semi-Imperative in the Light of Information Generated by Artificial Intelligence

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Abstract

The article analyzes business decision-making in the light of information generated by artificial intelligence and proposes the concept of the ethical semi-imperative as a tool combining business effectiveness with moral responsibility. The starting point is the assumption that, under conditions of the digital economy, information performs a strategic, relational and legitimizing function, while its use in decision-making processes requires ethical reflection. The text discusses the significance of AI-generated information, the problem of incomplete knowledge, information asymmetry and the risks resulting from decision automation, such as lack of transparency, model hallucinations, algorithmic bias and responsibility for the consequences of AI system operation. The author presents the ethical semi-imperative as a contextual, self-imposed set of directives that goes beyond formal legal compliance and makes it possible to harmonize economic goals with organizational values. The article also points to the importance of ethics by design, algorithm auditing, corporate digital responsibility and transparent technology management. The conclusions emphasize that responsible use of AI requires not only technological tools, but also a culture of trust, transparency and dialogue with stakeholders.

Keywords: artificial intelligence; ethical semi-imperative; business decisions; information; business ethics; information asymmetry; digital responsibility; transparency; algorithms; transformational public relations

Introduction

Business decision-making is a key element of corporate strategy (Velasquez, 2021), determining not only organizational success, but also its impact on the surrounding society (Brenkert & Beauchamp, 2012). In the information age, in which data are one of the most important resources, ethics in business decision-making becomes an unavoidable aspect of effective and sustainable organizational development. The significance of information as the basis for strategic decisions is developed in a particular way in the achievements of the Poznan School of Information Economics (PSEI). The authors of this school emphasize that information - especially under conditions of asymmetry and uncertainty - performs not only a cognitive function, but also a relational and legitimizing one (Deszczyński, 2020; Leszczyński, 2020; Rydzak, 2023a). In this context, Trębecki (2020) points to the role of coherent and transparent internal communication as a key element of information management in complex digital environments.

However, as empirical research shows, information practices do not always correspond to these ideals. Rydzak (2011) notes that almost one third of managers declare readiness to engage in unethical behaviour, also in the area of providing information to stakeholders, especially in crisis situations. Importantly, these actions are perceived by them not only as effective, but also as morally justified, even despite awareness of their potential negative consequences. Market pressure and stakeholder expectations, as well as the requirement to report short-term results, cause some decision-makers to resort to unethical actions, treating information as a tool for achieving goals rather than as the foundation of responsible management.

Analyses by Rabczun and Świerczyńska additionally indicate that the way the role of information and its ethical use are understood differs depending on the cultural context. While moral values may be relatively universal, information ethics - understood as the practice of managing information in organizational relations - is strongly conditioned by the level of development, culture, local norms and social expectations (Rabczun, 2019; Świerczyńska, 2020).

At the same time, attention should be paid to an additional aspect, namely the impact of information generated by artificial intelligence on the business decision-making process. In the author's assessment, the essence of this element comes down to understanding and quantifying the value carried by information and by the decisions made on its basis by modern enterprises, because the basic problem faced by every business decision-maker is the incompleteness of knowledge (Wilczyński, 1995; Czarnecki, 2023). Decisions about entering a new market, introducing a product or optimizing the supply chain have historically been made under conditions of considerable uncertainty. Artificial intelligence appears here as a powerful tool for reducing this gap. Systems based on machine learning are able to analyze enormous data sets, or big data, in real time - from global market trends, through consumer sentiment in social media, to the smallest fluctuations in production-line efficiency.

Thanks to artificial intelligence, managers gain access to predictions and recommendations at a level of detail that was unattainable even a decade ago. Algorithms can forecast demand with unprecedented accuracy, identify hidden patterns in customer behaviour or optimize pricing strategies on the fly. In this sense, AI is a practical realization of the dream of overcoming cognitive and informational limitations, bringing business closer to the ideal of fully rational, data-driven decision-making. This reduces the classical information asymmetry between the firm and its environment, allowing faster and seemingly more accurate responses to market signals.

This issue becomes particularly important in the context of the use of artificial intelligence (AI), which is already used not only for analysis, but also for autonomously generating

information and supporting or even making decisions. Such a situation creates the need to find a universal foundation that combines ethical requirements with business efficiency. The ethical semi-imperatives proposed by the author may provide such a foundation. This text is therefore an analysis of the following issues:

1. How does information, especially information generated by AI, shape the ethical dimension of business decisions?
2. How does this affect the architecture of the decision-making process itself?
3. What limitations and challenges are associated with integrating these two spheres - information generation and ethics - in business practice?

1. Explanation of Concepts and Context

The definition of the basic conceptual apparatus is crucial for this analysis. It includes the issues of decision-making, the ethical semi-imperative and information generated by artificial intelligence. These concepts constitute the theoretical framework and research area of the study, and their explanation is a necessary condition for fully understanding the implications resulting from the analyzed problem.

In an era of dynamic technological innovation, and in particular the evolution of artificial intelligence (AI), the importance of ethics in economic activity is increasing. This is the result of growing awareness among entrepreneurs of the need to conduct business responsibly. This tendency is reflected in the growing popularity and implementation of initiatives such as CSR[1] and ESG[2]. On the other hand, this dynamic is also manifested in the entry of new technologies onto the market, especially artificial intelligence models in the form of language models (Hadi, 2023), which are included in the present analysis.

[1] For more, see: M. Suska, Społeczna odpowiedzialność biznesu - studium porównawcze reżimów prawnych, Roczniki Administracji i Prawa, No. XVI (2), pp. 301-302.
[2] For more, see: D. Ślażyńska-Kluczek, M. Brzezek, Czynniki ESG jako elementy zrównoważonego rozwoju wpływające na postrzeganie przedsiębiorstw przez konsumentów, Kwartalnik Nauk o Przedsiębiorstwie, No. 4/2023, pp. 75-76.

Business decision-making[3] is a process that is crucial for the functioning of every organization. It is a complex activity in which decision-makers analyze available information, evaluate various options and select a solution consistent with the firm's goals (Holska, 2016). Decision-making[4] includes both the choice of strategy and everyday operational decisions, as well as development decisions[5]. In the context of the ethical semi-imperative, this process becomes much more complex because it requires balancing business values with ethical values. The ethical semi-imperative in the context of business decision-making means combining ethical aspects with business imperatives. It is an attempt to find a balance between achieving business goals and, at the same time, respecting ethical principles.

[3] The term "decision" derives from the Latin word decisio, which means a resolution, settlement or ruling. In management science, the concept of a decision may be defined as "a conscious, non-random choice of one among many - at least two - possible courses of action" (Bolesta-Kukułka, 2000). Similar attempts at definition can be found in other authors, such as Ściborek (2003), Griffin (2006) and Targalski (1986). A decision, as an act of making a choice, constitutes the conclusion of the decision-making process. The process of making a decision is the act of choosing one option from those available, which makes a managerial decision an important resolution concerning the undertaking of a specific action or refraining from it.

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[5] For more, see: Nag, R., Hambrick, D. C., & Chen, M. J. (2007, revised and widely cited after 2010). What is strategic management, really? Inductive derivation of a consensus definition of the field. Strategic Management Journal, 28(9), 935-955; Škerlavaj, M., Černe, M., & Dysvik, A. (2014). I get by with a little help from my supervisor: The role of leader-member exchange in the innovation process. Leadership & Organization Development Journal, 35(6), 491-509; Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2020). Strategic Management: Competitiveness & Globalization: Concepts and Cases (13th ed.). Cengage Learning.

In this light, the ethical semi-imperative is not an unequivocal command, but rather a set of principles that influence the decision-making process and include a range of values, such as honesty, justice or respect for employee rights. In the context of the ethical semi-imperative, decision-makers are obliged to take these values into account in the decision-making process in order to achieve a balance between business success and ethical conduct (Trevino & Nelson, 2004).

Therefore, it should be emphasized that, in the author's assessment, information will perform not only a strategic role, but also an ethical one. Decision-makers must be aware of the sources and effects of information, as well as of the potential ethical implications associated with its use. Information consistent with ethical principles becomes a key element of the decision-making process, shaping the organization's approach to semi-imperatives of an ethical nature (Mintzberg, Raisinghani, et al. 1976). Information that contributes to achieving organizational goals while respecting ethical standards becomes a key element of the firm's lasting success (Simon, 1979; Werhane, 1999; Capurro, 2008).

The question therefore arises about the applicative value of the above considerations and about how they may actually affect the decision-making process per se.

The term "ethical semi-imperative," proposed by the author, has not yet acquired an established definition in the discourse of management sciences. The author therefore proposes to understand it as a theoretical construct describing a set of ethical norms and principles that are not absolute in character - as in the Kantian categorical imperative - but constitute key directives in decision-making processes.

Their fundamental function is to enable decision-makers to harmonize economic goals with ethical principles, such as justice, transparency, respect for employee dignity or social responsibility. The fundamental difference from categorical imperatives lies in the flexibility of semi-imperatives and their sensitivity to the situational context. While the obligation to pay tax liabilities constitutes a legal and ethical imperative, action that goes beyond the minimum, for example voluntarily raising work or wage standards, belongs to the domain of the semi-imperative.

Therefore, ethical semi-imperatives may be perceived as a tool for building sustainable corporate governance in which decisions are both economically rational and morally legitimized.

The concept of the ethical semi-imperative implies a specific approach to the role of information in decision-making processes. In this approach, its evaluation goes beyond standard strategic metrics and includes a multidimensional analysis in which economic value is inseparably intertwined with moral legitimacy. Such an analysis therefore takes into account, first, the quality and relevance of data, including their accuracy and timeliness, which condition the rationality of decisions. Second, compliance with ethical principles is a key criterion, which means that both the process of acquisition and the utilization of information must be transparent and lawful. Third, its practical usefulness is assessed, that is, its ability to generate value for the organization within ethically permissible actions. Finally, this approach imposes on decision-makers the obligation to be aware of and responsible for the ethical implications of the information activities undertaken, including their potential side effects.

Turning to the third key concept, information generated by artificial intelligence should be defined as all data, texts, analyses or recommendations that are not merely reproduced, but synthetically created by algorithmic models, especially large language models. Unlike information obtained by traditional methods, it is characterized by unique properties that constitute a direct challenge for decision-making processes. These include, among others, the "black box" problem, or opacity, meaning a lack of transparency as to

how the model formulates conclusions (Pasquale, 2015); the risk of generating confabulations, or hallucinations, meaning information that appears credible but is in fact false (Ji et al., 2023); and the tendency to reproduce and amplify bias contained in training data, which may lead to unfair or discriminatory results (Suresh & Guttag, 2021). It is precisely these features that make traditional criteria for assessing information insufficient, while the application of the framework defined by the ethical semi-imperative becomes a necessity for the responsible decision-maker.

2. Theoretical Assumptions of the Ethical Semi-Imperative

The contemporary business landscape is inseparably intertwined with the dynamic development of artificial intelligence technologies. This technology, while promising unprecedented efficiency and innovation, simultaneously places before organizational leaders a mirror in which the deepest questions about responsibility, purpose and the character of their enterprises are reflected. In this new paradigm, the traditional approach to ethics, reduced to the role of a shield protecting against legal risk, proves insufficient. A gap emerges between what is legal and what is right and desirable. To fill this space, we need a new language and a new concept. This is why the need arose to introduce the concept of the ethical semi-imperative as a key navigational tool for firms that aspire not only to survive in the era of AI, but to consciously lead within it. The ethical semi-imperative is not merely a set of principles, but a strategic necessity that separates firms that merely use AI from those that use it responsibly.

The foundation of every responsible business activity is the absolute legal imperative. This is the basic regulatory ground that sets the boundaries of what is absolutely unacceptable. It requires data protection, prohibits discrimination and enforces transparency of high-risk systems. However, this approach is inherently reactive and universal. Its goal is to minimize harm and avoid penalties. Compliance with the law is a necessary condition, but by no means sufficient to build lasting value in an economy based on trust. An organization whose ethical ambitions end at the threshold of compliance condemns itself to sterility. Its AI systems, although technically legal, remain empty, deprived of deeper purpose and identity, which in a world of increasing transparency is strategically disadvantageous.

It is precisely here that the key role of the ethical semi-imperative becomes visible. It emerges not from external legislative compulsion, but from the internal DNA of the organization - its mission, declared values and brand promise. It is "semi" because the firm itself, on the basis of its unique character, defines its content. It is, however, an "imperative" because in today's business ecosystem ignoring it leads directly to the loss of customer trust, erosion of employee engagement and, consequently, loss of legitimacy to operate in the market. It is a self-imposed, strategic command that technology should be an authentic reflection of who the firm wants to be.

In practice, the ethical semi-imperative manifests itself in everyday business decisions. Consider a recruitment algorithm where the legal imperative prohibits discrimination on the basis of gender. The semi-imperative, rooted in the firm's value of "diversity as a driver of innovation," forces the organization to go one step further - to actively design the system so that it mitigates historical biases and consciously seeks underrepresented talent.

Similarly, a customer-service chatbot operating in compliance with the law will not violate data privacy. However, a chatbot designed in the spirit of a semi-imperative based on the value of "trust" will also not use manipulative psychological techniques to persuade the customer to make a purchase, even if this would be legal. It becomes a digital brand ambassador, not merely a soulless sales tool.

Ultimately, adopting the perspective of the ethical semi-imperative is a fundamental strategic decision. It is a transition from passive risk management to active value building. Firms that follow it understand that in the long term the greatest risk is not a financial penalty, but the loss of trust. They understand that the best employees are attracted not only by remuneration, but also by a sense of purpose and by acting in accordance with their own moral compass.

3. Semi-Imperative and Imperative - Cognitive Background

Table 1. Comparison of the imperative and the semi-imperative

Aspect	Imperative - legal level	Semi-imperative - strategic and ethical level
Source	External - legislation, regulations	Internal - company values, mission, strategy
Character	Universal, absolute	Contextual, self-imposed
Goal	Avoiding penalties, compliance	Building trust, reputation and competitive advantage
Attitude	Reactive	Proactive
AI example	An AI system must not discriminate on the basis of gender.	An AI system should be actively audited and designed to promote diversity in the workplace.

Source: Own elaboration.

The table presented above synthetically shows a fundamental tension in contemporary management: the difference between action dictated by a legal imperative and conduct resulting from an ethical semi-imperative. The first approach belongs to the domain of necessity and compliance; the second belongs to the sphere of values, identity and the conscious building of competitive advantage. In the age of technological revolution, especially in the context of artificial intelligence, this distinction becomes not only an academic dichotomy, but a key factor determining long-term success and the social legitimization of the enterprise. Although compliance with the law is the foundation, the proactive, values-based semi-imperative approach becomes the true source of resilience and lasting value.

The legal imperative, as the table indicates, has its source in external factors - legislation and regulations. Its universal and absolute character is perfectly reflected in institutional theory, which describes how organizations become similar to one another under the influence of external pressure, the so-called coercive isomorphism, in order to gain legitimacy and avoid sanctions (DiMaggio & Powell, 1983). An example in the context of AI is the European Union's General Data Protection Regulation (RODO/GDPR)[6], which imposes universal rules on all entities processing the data of EU citizens, for example concerning automated decision-making and the AI Act[7].

[6] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC - General Data Protection Regulation.

[7] Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144, and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 - Artificial Intelligence Act. Text with EEA relevance.

Here the resource-based view of the firm comes to the aid of the analysis. It states that sustainable competitive advantage results from unique, difficult-to-copy resources and competencies (Barney, 1991). A strong ethical culture and authentic commitment to social responsibility may be precisely such resources. Empirical research has repeatedly confirmed a positive correlation between a mature approach to CSR and the financial results of a firm, although the mechanism of this relationship is complex and includes, among other things, better reputation and greater employee engagement (Orlitzky, Schmidt, & Rynes, 2003).

A firm that decides to proactively audit its algorithms in terms of promoting diversity does not do so under legal compulsion, but because it fits its identity and its strategy of building an inclusive workplace.

4. The Ethical Semi-Imperative in Practice

Organizations use various approaches to develop and maintain a work environment in which ethics and other desired employee characteristics are promoted (Herndon et al., 2001; Hunt et al., 1989, Trevino & Nelson, 2011). The process of ethical decision-making itself often requires access to and evaluation of cognitively complex information, including the assessment of individual, situational and organizational factors. Increased access to or flow of such information may be useful in ethical decision-making, but information overload may lead to a situation in which employees are not engaged and their judgment is erroneous (Rydzak, 1999).

One response to increased information needs is the use of techniques and technologies that help collect and process information. Some researchers warn that the use of such methods may adversely affect ethical thinking because it obscures certain issues from decision-makers, which in turn leads to ethical conflict among employees who do not see the organization noticing and resolving emerging ethical problems. Consequently, the data-driven decision-making process should focus on ethical issues, which will help avoid conflict and bring many diverse positive outcomes to the enterprise and its employees (Valentine et al., 2014; Ruiz-Palomino et al., 2013).

Employees' perception of ethical data-driven decision-making is positively related to perceived lateral relations, and these in turn are associated with organizational commitment. This means that improving the flow of information in a firm should be consistent with improving the horizontal flow of information, and both factors should simultaneously increase employee engagement. In the context of shaping an ethical environment in enterprises, there are several key strategies emphasized in management and organization theory. The first of these is ethical values, which constitute the foundation of employee behaviour (Herndon et al., 2001; Hunt et al., 1989; Trevino & Nelson, 2011). Recruiting employees in accordance with these values and socially introducing them into the organization are further important steps in building an ethical climate in the organization (Fritz et al., 1999; Sims, 1991; Valentine et al., 2014). In addition, managerial actions and training programs cannot be underestimated, as they are fundamental for consolidating ethical principles in the firm (Fritz et al., 1999; Koh & Boo, 2001; Schwepker, 2001; Trevino et al., 1998; Trevino & Nelson, 2011). Codes of conduct constitute a set of guidelines that precisely define accepted norms and values (Koonmee et al., 2010; Ruiz-Palomino et al., 2013; Schwepker, 2001; Trevino & Nelson, 2011).

In the context of ethical decision-making, providing employees with appropriate information becomes crucial. This process requires access to and analysis of complex data, which undoubtedly increases the organization's information burden (Ferrell and Gresham, 1985; Hunt and Vitell, 1986; Jones, 1991; Rest, 1986; Trevino, 1986).

It is worth drawing attention here to the risk associated with excessive amounts of information, which may lead to employee disorientation and negatively affect the decision-making process (Eppler & Mengis, 2004; Brans & Gallo, 2007; Le Menestrel & Van Wassenhove, 2004; Singer & Singer, 1997).

As part of the adaptation of organizational structures, there is a tendency to facilitate the collection and processing of information related to ethical decisions (Rottig et al., 2013; Galbraith, 1974). Data-based methods are particularly valuable here, but one must simultaneously be careful about their potential side effects, such as obscuring ethical issues (Eppler & Mengis, 2004; Hollingworth, 2014; Le Menestrel & Van Wassenhove, 2004; Singer & Singer, 1997; Trevino & Nelson, 2011). In the literature, a certain concentration can be observed on the relationships between data-driven decisions and organizational structures, especially lateral relations.

Perceiving data-driven decisions as ethical is associated with the belief that the organization uses lateral relations, which in turn increases employee engagement in organizational life (Eppler & Mengis, 2004; Galbraith, 1974). Lateral relations perform the function of mediator between data-driven decisions and employee engagement (March & Simon, 1958; Tushman & Nadler, 1978).

It should be emphasized that improving the flow of information, especially data-driven decisions, may support lateral relations and increase employee engagement (Hunt et al., 1989; Schwepker, 2001; Singhapakdi & Vitell, 2007; Trevino et al., 1998; Viswesvaran et al., 1998). However, caution is recommended in the implementation of data-driven decisions, suggesting a focus on ethical issues in order to avoid potential ethical conflicts in the organization (Ruiz-Palomino et al., 2013; Schwepker, 2001; Koonmee et al., 2010).

In the context of technological change and the greater volume of data and information used, it is also worth noting that threats were identified in the literature already in the 1960s and 1970s. This refers to the theory of individual decision-making in the absence of knowledge, that is, to the ethical issue in the case of decision-making under lack of information. K. Szaniawski (1967) indicates that when the decision-maker does not possess knowledge, it may be presumed that they do not possess data or cannot process it properly, there is no criterion on the basis of which it would be possible to attribute an ethical element to the decision made, because the decision-maker would not be able to assess the legitimacy or rationality of the decision, and consequently also its consequences. This means that, according to the theory of decision proposed by Szaniawski, it is significantly problematic to frame decisions ethically or to attribute the quality of being ethical to decisions when their effects are difficult to determine, or in a situation where there is uncertainty concerning the occurrence of these effects. This is particularly interesting today, as "uncertainty" is increasingly discussed in the decision-making process.

The question arises whether a lack of rationality, awareness or certainty in the decision-making process may relativize the semi-imperative ethical character of the decision.

5. Artificial Intelligence in the Decision-Making Process

Ethical norms constitute a fundamental pillar of contemporary strategy and corporate governance. Their observance is a necessary condition for building lasting trust capital among stakeholders, which directly translates into the long-term stability and market success of the enterprise. In the era of digital transformation, driven by the dynamic development of technology, the ethical dimension of implementing artificial intelligence models acquires particular significance. These technologies, possessing an unprecedented ability to analyze large-scale data sets and automate complex decision-making processes, introduce new paradigms, but also generate new, multidimensional ethical dilemmas (Jobin, Ienca, & Vayena, 2019; Rydzak, Trębecki & Verhoeven, 2020; P. Adamus-Matuszyńska et al., 2023; Rydzak 2023b).

Artificial intelligence is revolutionizing key areas of economic activity, from human capital management, through supply chain optimization, to the personalization of marketing strategies and support in decision-making at the managerial level. However, the integration of artificial intelligence systems into business processes requires in-depth analysis of potential ethical risks. An analysis of contemporary scientific literature allows these challenges to be systematized within four main, interrelated categories, presented in the table below.

Table 2. Main challenges concerning the use of AI-generated information

Challenge	English equivalent	Description of the problem	Proposed solution / concept	Source
Transparency and accountability	Transparency & Accountability	The "black box" problem, where the algorithm's decision-making process is unclear, undermining trust and making it difficult to assign responsibility.	Development of Explainable Artificial Intelligence (XAI).	Arrieta et al., 2020
Impartiality and fairness	Fairness & Non-Discrimination	AI systems trained on historical data may reproduce and amplify existing biases, leading to discrimination.	Identifying and mitigating algorithmic bias.	Ferrer et al., 2021
Privacy and data security	Privacy & Data Security	AI models require enormous amounts of data, often personal data, which creates risks for privacy and information security.	Implementing rigorous data governance frameworks compliant with regulations such as GDPR.	Stahl, 2021
Social and corporate responsibility	Social & Corporate Responsibility	The impact of AI technology extends beyond the organization, affecting the labour market, social cohesion and the environment.	Adopting Corporate Digital Responsibility to manage social consequences.	Lobschat et al., 2021

Source: Own elaboration based on Arrieta et al., 2020, Ferrer et al., 2021, Stahl, 2021, Lobschat et al., 2021.

In response to the growing ethical complexity of artificial intelligence, global standard-setting institutions and expert bodies are intensifying work on creating regulatory frameworks and standards. Examples of these activities include initiatives such as the Ethically Aligned Design program conducted by the Institute of Electrical and Electronics Engineers (IEEE), and the guidelines developed by the High-Level Expert Group on Artificial Intelligence at the European Commission (AI HLEG). These documents provide a foundation for further research and practical implementation, focusing on ethical algorithm design, risk management and the strategic integration of ethical principles into business models (IEEE, 2019; AI HLEG, 2019).

At the corporate level, these external guidelines must be translated into internal policy and organizational culture. This goes beyond mere compliance with regulations, leading to the concept of strategic value alignment. It assumes that AI systems should be designed and implemented in a way that is consistent not only with the law, but also with the fundamental ethical values of the enterprise and the legitimate expectations of all its

stakeholders (Gabriel, 2020). Such a perspective requires AI-supported decisions to be rooted in principles of honesty, transparency and responsibility, becoming an integral part of corporate digital responsibility.

However, adequate management of AI ethics requires a perspective that goes beyond the framework of a single organization and takes into account broader social implications. In scientific and public discourse, increasing emphasis is placed on new critical areas, as presented in Table 3.

Table 3. Critical areas

Area	Description
Equal access and distributive justice	There is a real risk that the benefits of AI will deepen existing inequalities, creating a new version of the digital divide, in which access to advanced technologies becomes another factor of social stratification.
Education and awareness development	The effective and ethical implementation of AI in society depends on the level of AI literacy. Building widespread competencies to understand the basic operation, possibilities and limitations of these technologies is crucial for informed public debate and responsible innovation.

Source: Own elaboration based on Cowgill & Tucker, 2020, Long & Magerko, 2020.

The analysis of specific case studies provides empirical evidence of the existence and scale of ethical challenges associated with the implementation of artificial intelligence. One of the most frequently cited problems is algorithmic bias, which may lead to systemic discrimination and the deepening of social inequalities. A notorious example is Amazon's experimental recruitment tool, which, trained on historical data dominated by men, systematically favoured male candidates. This incident, publicized in 2018, became a model example of how unintended biases can be encoded in AI systems, forcing the company to abandon the project and making the industry aware of the need to implement rigorous audit mechanisms (Dastin, 2018).

In response to these and other challenges, leading technology corporations began to develop internal corporate-governance structures in the area of AI ethics. An analysis of their actions reveals different, though complementary, approaches to this problem, as presented in Table 4.

Table 4. Approaches of selected corporations to strengthening ethical activities

Corporation	Approach / action	Example / effect
Google	Public declarations and response to internal pressure.	Publication in 2018 of a set of ethical principles in response to employee protests, including a commitment not to develop technologies for weapons purposes. Non-renewal of the contract with the Pentagon for "Project Maven," concerning drone image analysis.
Microsoft	Institutionalization of oversight and development of tools.	Creation of an internal ethics committee, the AETHER Committee, to assess the social impact of technology. Investment in the development of tools, for example the Fairlearn package, which helps developers identify and mitigate bias in machine-learning models.

Source: Own elaboration.

6. Artificial Intelligence and Ethics in Business

The implementation of artificial intelligence (AI) models in business strategies creates new paradigms, introducing complex challenges and opportunities within normative ethical frameworks. The ability of AI systems to analyze and generate enormous data sets, or Big Data, revolutionizes decision-making processes in organizations, but at the same time raises fundamental questions concerning the ethicality of their use and responsibility for the autonomous actions of algorithms (Dignum, 2019).

Decision-making processes supported by artificial intelligence carry unique implications that do not occur in management models based solely on human judgment. One of the key problems is the issue of transparency and explainability, often referred to as the "black box" problem. Many advanced AI models, such as deep neural networks, make decisions in a way that is incomprehensible even to their creators, which prevents full verification of the premises underlying key business choices (Lepri et al., 2018).

Another important challenge is algorithmic bias. AI models trained on historical data may unconsciously reproduce and even reinforce stereotypes and inequalities existing in society. This may lead to discriminatory outcomes in areas such as recruitment, creditworthiness assessment or offer personalization, exposing the organization to reputational and legal losses (Mittelstadt et al., 2016; Kush et al., 2024). This forces enterprises to implement robust mechanisms for auditing and validating systems in order to ensure their fairness and impartiality.

In response to these challenges, increasing emphasis is placed on the development of so-called ethics by design, meaning the integration of ethical principles already at the stage of designing and implementing AI technologies. This postulate assumes that responsibility, transparency and justice should not be merely an addition, but an integral element of the architecture of artificial intelligence systems in the corporate environment (Floridi & Cowls, 2019).

The analysis of ethical implications associated with the implementation of artificial intelligence in business highlights several key areas requiring particular attention. The complexity of these challenges can be considered at different levels - from the technical, through the organizational, to the social.

At the technical and operational level, automation of decision-making processes is of fundamental importance. The use of AI for autonomous decision-making, for example in the area of risk assessment or resource allocation, requires absolute transparency of the algorithms used and certainty that training data are free from systemic bias. This is directly connected with algorithmic ethics, which postulates that decisions generated by autonomous systems should be consistent with fundamental principles of justice, accountability and transparency (Binns, 2018).

From a research and development perspective, increasing attention is being paid to attempts to implement ethical standards directly into the architecture of algorithms. This is a dynamically developing field whose goal is to create systems possessing so-called moral competencies, capable of making decisions consistent with predefined ethical norms, which constitutes one of the most serious challenges for contemporary computer science (Scheutz & Arnold, 2021).

Ultimately, at the strategic and social level, systematic AI impact assessment is necessary. Organizations must carry out a holistic analysis of the consequences of implementing artificial intelligence, taking into account its impact on all stakeholders - employees, customers, business partners - as well as on society as a whole (Cath et al., 2018). Such an assessment allows potential risks to be proactively identified and mitigated before they lead to negative consequences.

Final Remarks

The use of artificial intelligence models in business requires an approach based on solid ethical foundations that take into account the values and utility of the information generated. The concept of the ethical semi-imperative proposes that decisions made using AI should be not only effective and compliant with regulations, but also ethical in the sense of being consistent with the internal convictions of the enterprise. Integrating such approaches into management strategies may contribute to sustainable development and the long-term success of firms, while building social trust and supporting a high management culture.

The integration of artificial intelligence into business involves many ethical challenges that require a responsible approach and careful management. Equal access, monitoring and correction of algorithms, case studies, as well as education and awareness-raising, are key elements that may contribute to the ethical and sustainable development of AI technologies. Enterprises must strive not only for innovation and efficiency, but also for building social trust through transparent and responsible action.

The use of information generated by artificial intelligence is becoming a kind of ethical semi-imperative for contemporary business. Growing competitive pressure and measurable benefits, such as process optimization, increased innovation and efficiency, mean that firms are increasingly basing their activities on AI solutions.

Although it is difficult to argue with the logic of such an approach, one must at the same time remember the serious threats it creates, including the risk of reproducing social biases, lack of algorithmic transparency and the problem of responsibility for erroneous or harmful content.

In order to balance these forces and build the foundations of digital trust, action toward transparency is necessary. A key step would therefore be the formal inclusion of principles for the use of AI in industry ethical codes. Such a provision would not only increase transparency, but above all oblige firms to implement and use this powerful technology responsibly.

In light of the achievements of the Poznan School of Information Economics, the foundations of ethical technology management are informational credibility, transparent communication and responsible relations with stakeholders, treated as strategic resources in the process of building reputation (Deszczyński, 2020; Leszczyński, 2020; Kaczmarek, 2020; Kaczmarek-Śliwińska, 2019; Rydzak, 2016a, 2016b, 2023b; Trębecki, 2020; Świerczyńska, 2020). The integration of artificial intelligence (AI) therefore requires not only the implementation of technological tools, but also the shaping of cognitive and decision-making competencies, support for a culture of openness and the conscious design of communication systems that strengthen trust under conditions of technological uncertainty.

In the context of the issues discussed in this chapter, transformational public relations (TPR) constitutes a reflective approach to managing information and change, taking into account the need not only for the technical implementation of AI, but also for legitimizing its presence in organizations and society through inclusive, dialogical and systemically rooted communication strategies. As the research of Woźniak-Jęchorek, Rydzak and Kuźmar (2023) indicates, the perception of AI as a tool for productivity growth often coexists with limited trust in its decision-making autonomy. Thus, it becomes necessary to apply solutions consistent with the logic of TPR - oriented toward building relational legitimization, transparency of decision-making processes and the active inclusion of stakeholders in defining the framework of technological change.

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