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Strategic decision-making with AI: An ethical integration model

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Abstract

The rise of big data has made decision-making more complex, necessitating the use of advanced analytics. While organizations must continually adapt to new technologies to remain competitive and sustainable, excessive dependence on these tools in strategic decision-making can lead to major obstacles that compromise their effectiveness and sustainability over time. Therefore, this paper proposes a comprehensive and conflict-theory-based model that integrates AI-driven data analysis with leaders' intuition to support ethical Strategic Decision-Making. The suggested model aims to bridge the gap in humanizing decision-making and fostering an environment conducive to innovation. This model empowers leaders to make use of AI's speed while maintaining ethical integrity through a structured approach to conflict resolution.

Keywords: strategic decision-making, rational approach, intuitive approach, leadership, artificial intelligence, management.

1. Introduction

Rajagopal et al. (2022) show 60% of organizations now embed Artificial Intelligence (AI) in Strategic Decision-Making (SDM) processes; thus, managers are called to deal wisely with the AI's various opportunities for enhanced data-driven strategies in one hand, and the significant ethical and practical concerns that it presents on the other hand. The proliferation of big data has increased the complexity of decision-making processes, requiring managers to utilize sophisticated analytical tools and approaches to extract actionable insights from big data sets (Dash et al., 2019). Moreover, organizations must permanently adapt their strategic context to

be able to effectively leverage new technologies, ensuring their sustainability in a competitive market (Iscaro et al., 2022).

It is important to emphasize that Strategic Decision-Making (SDM) as an essential aspect of management along with planning, organizing, leading and supervising differs from individual decision-making; by prioritizing the best interests of the organization and involving potential subordinates (Hlavatý & Ližbetin, 2023), because decision-making is not only about solving problems. It also involves delegating to other parties that play an important role in the success of decisions and ensuring their effective implementation.

In terms of surviving as successful organizations, in a context of increasing complexity and competitiveness, it has become essential to innovate quickly and consistently in order to persist, and to look for ways to enhance the ability to make effective decisions, by integrating intuition alongside predominantly rational decision-making processes (Calabretta et al., 2017).

This manuscript examines how SDM is evolving, particularly through the integration of AI with traditional decision-making approaches. It highlights the challenges and advantages of AI in managerial decisions, focusing on ethical issues and promoting adaptive leadership. The manuscript proposes a framework that combines intuition and a rational approach in the SDM process, aiming for more ethical and responsible leadership. It offers valuable insights for managers across various fields, helping them navigate the complexities of modern SDM and leverage emerging AI technologies for optimal organizational outcomes.

2. Understanding Strategic Decision-Making

SDM can be defined as a process by which organizational leaders identify and evaluate alternatives to guide the organization's long-term goals and performance (Thanos, 2023). The success of this process involves leveraging both gut feeling and logical reasoning to confront high-risk issues that can significantly affect the future of the organization (Gareth Shepherd et al., 2024). It also requires consideration of various internal and external factors, including market dynamics, organizational capabilities, and stakeholder interests, to make informed decisions that are aligned with the organization's strategic goals and vision.

Recent research by Gareth Shepherd et al. (2024) emphasizes the importance of balancing analytical thinking with intuition to effectively respond to the complexity and uncertainty that characterizes SDM. Managers are often required to make decisions in the face of ambiguity, where logical thinking is insufficient and may need to be complemented by adaptive and

flexible approaches (Thanos, 2023). Furthermore, Eisenhardt and Zbaracki (1992) recognize the value of diverse perspectives in shaping corporate strategies. They argue that SDM is a critical skill for organizational leaders and should go beyond top management to include the insights of employees at all levels.

In terms of management, researchers recognize the ambiguity variable and develop their conceptual models in order to engage logic and intuition when making decisions (Calabretta et al., 2017), especially situations that need quick responses to move the organization forward, as opposed to the rational model that requires systematic issue resolution through logical analysis and selection, which takes a long time to resolve (Kahneman, 2012). Experts' intuition is an essential complement to a rational decision, especially in dealing with uncertainty and fostering creativity, drawing on their prior knowledge and extensive experience (Kahneman, 2012). In innovative sectors, or creativity-related decisions, where traditional analysis may be limited by the availability of data, a gut feeling or intuition reinforced by psychological security and diverse cognitive thinking is much needed, however, uncritical dependence on intuition without adequate validation or team agreement can lead to serious errors (Gareth Shepherd et al., 2024). In stable environments, on the other hand, where comprehensive analysis and environmental scanning can be utilized, there is a strong need for rationality, but an excessive focus on details may slow down the decision-making process and impede flexibility in dynamic environments (Gareth Shepherd et al., 2024).

Decisions made under uncertainty are considered managerial risks, because managers must choose between different alternatives, each of which has its own associated risks (Miller et al., 2004). Other models consider different dimensions of decision-making, especially in marketing, such as market research, competitor analysis, and the structured strategic planning process, including situation analysis, strategy formulation, implementation, and evaluation (Anjorin et al., 2024). Another model considers the characteristics of CEOs, top management teams, and internal firm characteristics, such as formal planning systems and performance measures, as dimensions that significantly influence SDM practices according to Papadakis et al. (1998).

In psychology, researchers have developed different conceptual models of decision-making that consider the complexity and importance of choice, emphasizing the critical role played by external factors, as well as cognitive biases that influence our perceptions of risk and reward (Tael, 2011). Alternatively, intuitive and rational approaches to decision making can be

considered information-gathering and evaluating styles (Calabretta et al., 2017). Intuitive approach involves making decisions based on patterns of uncertainty and holistic thinking, often without fully understanding all available information. It can enhance performance when analytical data is unavailable or quick decisions are needed.

According to Sinnaiah et al. (2023), intuitive approach to decision-making can significantly improve SDM and organizational performance. This style includes both explicit (emotion-driven) and implicit (experience-based) processes (Bhat et al., 2021). Rational approach involves analyzing various solutions based on their relevance to the current problem before making a final decision. It requires critical evaluation of structured, conscious information. This process improves decision effectiveness by organizing decision criteria and evaluating alternatives individually. Managers using rational approach to decision-making tend to be more vigilant and organized when handling available information (Sinnaiah et al., 2023). Whereas Janis and Mann's conflict model of decision-making, for example, explains that decisional situation often involves psychological stress caused by internal conflicts when making decisions (Mann et al., 1997). Successful decision-makers handle this stress by staying adaptable and using balanced, effective strategies. When dealing with decisional situation, and how well they manage stress determines whether their decisions are constructive or lead to negative outcomes, which categorizes the decision-making according to this model into two patterns: Adaptive versus Maladaptive strategies. While the decision-making models discussed offer valuable insights into applying both spontaneous judgment and structured analysis, they fail to consider the evolving landscape of decision-making in the modern era.

These models predominantly focus on the decision-maker's cognitive processes, neglecting the role of external tools and technologies, such as artificial intelligence, that now play a critical role in supporting decision-making. Furthermore, although the models address key determinants and emphasize leader characteristics, they overlook the integration of modern technological advancements that have transformed organizational decision-making. This gap limits the applicability of these models in today's fast-paced, technology-driven environments, where decision-makers must navigate complex external factors and leverage new tools to enhance their decision-making capabilities. Additionally, incorporating conflict theory into SDM processes is crucial, as it provides a framework for understanding the dynamics and challenges that arise from differing perspectives within organizations. By updating and integrating conflict theory, decision-making models can better reflect the complexities of

organizational life and improve decision outcomes in a collaborative and increasingly diverse workplace.

Thus, this paper aims to propose a comprehensive theoretical model for SDM that incorporates the conflict model of decision-making, as well as the rational and intuitive approaches, particularly in the context of using AI within organizations to promote a more ethical and sustainable environment.

3. Conceptual Approach of the Model

This conceptual work started from synthesizing the literature through a systematic thematic analysis of studies on SDM, AI ethics, and leadership. Relevant literature was identified using multiple academic databases and journals, including SpringerLink, ScienceDirect, PubMed, the Directory of Open Access Journals (DOAJ), and SAGE Journals, covering the period from 2017 to 2024. A rigorous screening process was conducted, involving the review of titles and abstracts to assess relevance and eligibility. Following this process, a total of 30 articles were deemed suitable for inclusion.

Drawing on conflict theory, the paper develops an integrative model that combines intuitive and rational approaches for decision-making to provide a more comprehensive perspective on SDM in organizational contexts. This model seeks to merge traditional decision-making approaches with innovative methods, especially AI, and their ethical ramifications.

Both AI and human intuition face bias and explainability issues. Intuition is prone to cognitive biases, while AI can inherit biases from data, they both also lack transparency—AI's decisions are complex and hard to interpret, like how humans struggle to explain intuition (Vincent, 2021). Integrating AI with expert intuition can help mitigate these weaknesses. The objective of the proposed model aligns with the perspective put forth by Dellermann et al. (2019), who argue that the most probable future framework for collaboration between humans and machines is Hybrid Intelligence. This approach emphasizes leveraging the unique and complementary strengths of both human cognition and artificial intelligence to achieve outcomes that surpass what either could accomplish independently.

In this proposed model, the rational approach is connected to the use of AI, which relies on objective data and algorithms to analyze situations and predict outcomes. AI thus serves as a decision-making tool based on measurable criteria and statistical analysis. Conversely, the intuitive approach emphasizes human decision-making, which is rooted in judgment,

experience, and emotions. This process involves emotional intelligence, the ability to interpret social and human dynamics, and the flexibility to adapt decisions based on unique circumstances. This paper examines how these distinct approaches intersect within the proposed model. It highlights how AI, while inherently rational, can be adapted to human decision-making through ethical considerations, and shows how human intuition can be enriched with data and analysis provided by AI. Table 1 summarizes the key differences and complementary strengths of AI and human intuition, highlighting how their integration within the proposed model can enhance decision-making effectiveness.

Table 1. *Comparison of AI and Human Intuition in Decision-Making and Their Integration in a Hybrid Model*

Aspect	AI (Rational Approach)	Human Intuition (Intuitive Approach)	Integration / Hybrid Model
Basis	Data, algorithms, logic	Experience, judgment, emotion	Combines objective data with contextual awareness
Bias	Inherited from data	Cognitive and emotional biases	Each can help detect and correct the other's bias
Explainability	Often opaque or complex	Hard to articulate	Joint insights improve transparency
Strengths	Scalable, consistent, data-driven	Empathetic, adaptable, socially aware	Merges scale with sensitivity and flexibility
Weaknesses	Lacks context, emotion, and ethics	Inconsistent, error-prone under stress	Reduces individual limitations
Adaptability	Limited without retraining	Highly adaptable to nuance and change	AI aids human adaptability with real-time data
Role in Model	Supports rational, data-informed decisions	Guides nuanced, human-centered judgment	Ethical, context-rich decision-making grounded in both strengths

4. Opportunities of integrating AI in Strategic Decision Making

AI began taking shape in the 1950s, driven by efforts to mimic human reasoning, neural processes, and genetic traits (Khosrowshahi & Howes, 2005). This led to the development of expert systems, natural language processing, robotics, and machine learning methods like neural networks and genetic algorithms. Each approach has its strengths, but they work best when combined to capture the full complexity of human intelligence.

AI combines science and technology, drawing from areas like psychology, philosophy, linguistics, and engineering to create intelligent systems. It underpins many modern

technologies, connecting with psychology through cognition, engineering through robotics and image processing, and philosophy through logic and language. AI also plays a significant role in management, influencing decision-making, statistics, and information systems, showcasing its wide-ranging impact across disciplines.

The integration of AI, big data analytics, and machine learning is transforming decision-making in organizations, reshaping traditional management approaches and enhancing the quality and rapidity of decision-making. According to Rajagopal et al. (2022), organizations are increasingly relying on AI-generated results, but this trend creates new challenges related to excessive trust on AI decisions without managers effectively interpreting its insights. AI's process of handling data from collection to interpretation with greater speed and variety makes it an irresistible tool for organizational leaders (Trunk et al., 2020). For instance, Bello et al. (2022) emphasize the importance of using AI tools in the healthcare sector in balancing economic efficiency and patient safety in hospital operating rooms. They argue that achieving cost-effective, high-quality care means using advanced algorithms and data analytics to exploit key performance metrics to develop strategies to optimize operating room capacity, surgeon allocation, and staff scheduling.

The use of AI promotes organizational agility and transformation, and provides strategic advantages in dynamic environments, especially thanks to the democratization of its tools that have allowed small firms to compete with large corporations through big data, insights, and strategic directions that used to be the exclusive domain of large companies (Kaggwa et al.; 2024). Companies, despite their different histories, size and capital, are now almost on an equal footing when it comes to market competitiveness. However, as highlighted by previous researchers in the same context, various challenges related to data quality, adaptability, and human judgment of its accuracy remain. Thus, the optimal exploitation of AI requires organizations to adapt their strategies and management cultures to leverage its potential while addressing its inherent complexities.

Traditional SDM has become less effective in the encounter of big data and analytics that have changed the entire strategic direction of organizational companies around the world. Anjorin et al. (2024) assert that big data enhances the accuracy of market analysis and the effectiveness of strategic planning. The application of big data in the decision-making process by organizational leaders contributes significantly to real-time strategic planning that is in line with current market requirements, allowing the organization to be more competitive to anticipate trends and adapt

quickly, through the various information and facilities that big data and analytics provide to the company in a short time, such as understanding customer behavior and preferences, improving product development and facilitating personalized marketing strategies. Moreover, due to technological advances, major companies have established foresight units to systematically anticipate future developments and innovations to enhance SDM, rather than relying on chance in detecting emerging trends, which can hinder innovation (Nazemi et al., 2022).

While AI predictions often enhance the accuracy of decisions, factors such as dataset axiomatization and cognitive limitations may affect the effectiveness of explanations on human decision-making, thus Alufaisan et al. (2021) emphasize the importance of applying explainable AI with ethical and security considerations, and insist on evaluating human performance with and without explainable AI for greater objectivity.

Without neglecting its important limitations that still present a real challenge to organizational leaders, such as the absence of the human dimension and the overdependence on it at times, to the ethical aspect related to data protection and use. Thus, the optimal use of AI to enhance strategic decisions necessarily requires raising awareness of decision-makers of the importance of using a mix of instinct and critical thinking in decision-making and the importance of human judgment and interpretation to reach good decisions.

5. Contextual Barriers to AI Integration in Strategic Decision Making

The use of AI in SDM may improve the quality of outcomes, but overuse may lead to passive dependence that reduces the vigilance of decision-makers, which is critical in a human context that requires some flexibility. In his study in military settings, Johnson (2022) highlights that advanced AI capabilities may be perceived as superior to human judgment, leading to predominant reliance on its recommendations. This reliance is further influenced by the nature of the human tendency to defer authority and attribute human-like qualities to machines, which can lead to rigid and dehumanizing outcomes. Although the decision maker may have good intentions when delegating decisions to AI, excessive reliance on AI may create new mental health issues, especially depression and anxiety, due to quick and preconceived decisions that can gradually deprive the human judgment that considers differences and life circumstances.

The tendency to use new technology in SDM may effectively enable companies to innovate, anticipate market shifts, and enhance overall efficiency through AI-based strategies (Kaggwa et al., 2024). However, striking a balance between AI and human decision-making and ensuring

ethical use of AI is highly demanded, thus the continuous evolution of technology presents both challenges and opportunities for strategic marketing decision-making.

Managing the complexity and volume of data in organizational environments, implies the integration of big data and analytics. Anjorin et al. (2024) emphasized the need to leverage big data and analytics effectively, by investing in both technological infrastructure and skilled personnel, to take full advantage of the potential of big data. They emphasize the need to consider data privacy protection and security alongside the use of this technology. Adopting a data-driven culture that encourages experimentation, and continuous learning is essential to effectively leverage big data and analytics. Incorporating ethical considerations when using AI in the decision-making process is necessary, however, its implementation seems to be challenging due to the subjectivity of ethical behaviors. Some suggest that machines independently learn ethical guidelines while others advocate embedding decision rules into AI systems, (Trunk et al., 2020). Regardless of the challenges, organizations encounter in establishing universal ethical standards, transparency, fairness, and stakeholder engagement are critical to ethically integrating AI into organizational practices.

Globalization further affects the SDM process in organizations, through instability and constant changes that hinder the sustainability of the strategies developed by leaders. A study by Hessler (2020) identifies critical factors that influence sustainability and organizational decision-making, such as cognitive constraints among managers, stakeholder dynamics, and extensive experience in safety, health, and environmental management. This study compares European and Middle Eastern companies. It shows that Middle Eastern companies prioritize regional sustainability concerns more than European companies, which often underestimate local political influences on global strategies. However, sustainability initiatives are often hampered by conflicts between short-term profit goals and long-term sustainability objectives. Planning long-term strategies that ensure sustainability in an unstable world remains a major challenge for managers.

Cultural differences have a profound impact on SDM and organizational performance. The dynamic nature of culture is evident in the context of decision-making as Florian et al. (2024) emphasized that “being happy together may also make us more able to work together”. Although previous research has suggested that cultural dispositions are static, recent researchers instead suggest that emotions can dynamically influence the cultural predispositions of decision makers and the resulting decisions (Brundin et al., 2022). Understanding and effectively

managing emotions in the workplace is critical, especially in multinational environments. This comprehension can significantly impact the relationship between decision-makers, by minimizing conflicts and creating a positive environment that affects the quality and process of SDM (Calabretta et al., 2017; Gareth Shepherd et al., 2024).

The interconnectedness of an organization's systems, structure, leadership, and culture also shapes the SDM process. Torgaloz et al. (2023) highlight the important role of either centralization or decentralization in the SDM process, and the degree of decentralization which refers to the degree to which responsibilities are shifted to sub-managers or employees to manage their resources and make decisions according to the specificity of the area over which they have authority. They argue that according to the literature, organizations with centralized systems are more effective in some circumstances, while organizations with decentralized systems deliver positive results and contribute to competitiveness in other circumstances. Thus, according to them, it would be useful to combine these two structural systems for better management under certain circumstances.

Risk culture is another important factor in SDM. Osman and Lew (2021) considered that building and encouraging a work environment on risk culture, through recruitment, training and awareness, is essential, as it has positive results in reaching effective strategic decisions, promoting ethical behaviors and addressing real risks, and this can only be achieved effectively through effective governance of resources and transparent communication in the organization. Therefore, organizational leaders are primarily responsible for the culture they wish to foster within their organizations and the resulting behaviors.

Effective SDM must consider the circumstances of both internal and external factors, which is essential for the survival of the organization, emphasizing the need for effective management and decision-making practices (Radic et al., 2022; Hlavatý & Ližbetin, 2023).

6. The Role of Strategic Leaders in Shaping Organizational Direction

Strategic leaders play a critical role in guiding the overall direction, strategies, and future of an organization. They are responsible for the prevailing culture in the organization by promoting or hindering employee behaviors through the decisions they make to navigate dynamic environments and foster innovation. Thus, their role is fundamental to the organization. Strategic leadership is typically characterized by its presence at the highest levels of an organization, including the board of directors and the top management team (Vera & Crossan,

2004). This leadership approach considers political trends, environmental, economic, and social impacts when making decisions. Leaders in this approach are responsible for providing oversight, improving organizational culture and performance, ensuring proper management of resources, and developing strategic planning. Unlike other leadership approaches, this approach is distinguished by its consideration of internal and external challenges and opportunities to meet the overall needs of the organization (Carter & Greer, 2013).

The combination of exploring new opportunities and exploiting existing resources to maintain sustainability in a dynamic environment is a highly recommended capability that leaders must have and improve (Singh et al., 2023). This perspective on leadership is critical to successfully leading an organization, especially in times of crisis and increased uncertainty, by harmonizing strategic vision with operational rigor. In addition to these qualities and abilities that characterize strategic managers, emotional intelligence plays an additional important role in shaping qualitative strategic decisions (Alzoubi & Aziz, 2021), because a leader's self-management is generally reflected in his or her resources and organizational management. However, the most important dimension that can be considered the backbone of all the above-mentioned qualities of a leader, and to which the future of the organization and all the decisions made are linked, is the vision. Visionary leadership is a critical dimension in dealing with uncertainty, especially in today's competitive markets. A recent study by Yousef Farhan (2024) highlighted this evidence by analyzing business leadership in five cases of well-known companies, namely: Southwest Airlines, Anglo American, HSBC, Tenneco, and Dell Technologies. Based on an examination of the interplay between visionary leadership, an innovative mindset, and different leadership styles, his study found that visionary leadership and innovation were the most common themes, although each company used these concepts distinctively. For example, employee empowerment was a priority for Southwest Airlines, organizational efficiency for Anglo American, procedural control for HSBC, continuous reinvention for Tenneco, and long-term goals and data-driven decisions for Dell Technologies.

In short, strategic leaders play a pivotal role in guiding the direction of the organization and fostering innovation. Through their responsibilities in planning, coordination, resource management, supervision and evaluation, along with their abilities in emotional intelligence to promote an organizational culture aligned with the set goals, and leveraging networking to support and legitimize internal initiatives, so that everything serves their vision, which is the engine of the organization (Abuzaid et al., 2024).

7. Proposed Model for Strategic Decision-Making

Building on Janis and Mann's model for decision-making (Mann et al., 1997), this model is proposed to address the need for using both insight-driven and data-driven approaches in the process of SDM when using AI for ethical considerations.

In examining the role of AI in SDM, especially within organizational contexts, one cannot ignore its profound impact on the process. The empirical studies reviewed underscore the critical interplay between rational and intuitive approaches in fostering decisions that are not only effective but also sustainable. These approaches—when integrated—offer a pathway to decisions that respect ethical and human considerations, elevating the decision-making process beyond mere efficiency. Central to this discourse is the recognition of the factors influencing strategic decisions. Internal and external factors (challenges) create psychological stress on leaders, shaping the trajectory of their choices. This stress, often stemming from competing interests or shifting circumstances, demand an interpretive approach—one that leverages technology (AI) responsibly while accounting for the leader's pivotal role in guiding organizational outcomes.

According to their model, decisional situations generate psychological stress rooted in internal conflict. Adaptive decision-makers, however, exhibit a remarkable flexibility in addressing this stress, employing strategies that are both resilient and balanced. When confronted with overlapping factors—such as ethical dilemmas, uncertainty, and the need for significant organizational changes—a leader must harness this adaptability. The ability to withstand psychological stress determines whether one resorts to constructive or destructive strategies of decision-making. The constructive path involves integrating AI to analyze organizational data while simultaneously drawing on personal experience and emotional intelligence (human judgment). This balanced approach enables the leader to weigh diverse scenarios, consider their ethical implications, and make decisions that are both logical and humane. AI becomes indispensable in this process. It aids in synthesizing vast quantities of information, presenting logical scenarios (the rational approach). Yet, intuition—shaped by prior experiences and emotional acuity—remains equally vital. Together, these tools empower the leader to navigate the intricate terrain of decision-making with clarity and foresight. However, uncritical use of AI poses a significant risk. When AI is used as a crutch to alleviate psychological stress, it fosters an unbalanced decision-making strategy. This aligns with the maladaptive approach

described in conflict theory, where the desire to escape psychological stress overrides ethical and social considerations. The consequences of such an approach are profound: decisions devoid of ethical grounding led to environments plagued by toxicity, injustice, and a breakdown of trust—fertile grounds for anxiety, depression, and diminished organizational well-being (Borrelli et al., 2024).

A truly effective leader recognizes that psychological stress is not merely a burden but a crucible for growth. By resisting the temptation to rely solely on AI or experience, they cultivate a holistic perspective. They understand that prioritizing ethical deliberation, despite its complexity, fosters a culture of innovation and resilience (Abuzaid et al., 2024). This is the hallmark of adaptive leadership—an approach that reconciles rationality, intuition, and ethics in the pursuit of enduring success. Figure 1 illustrates this approach.

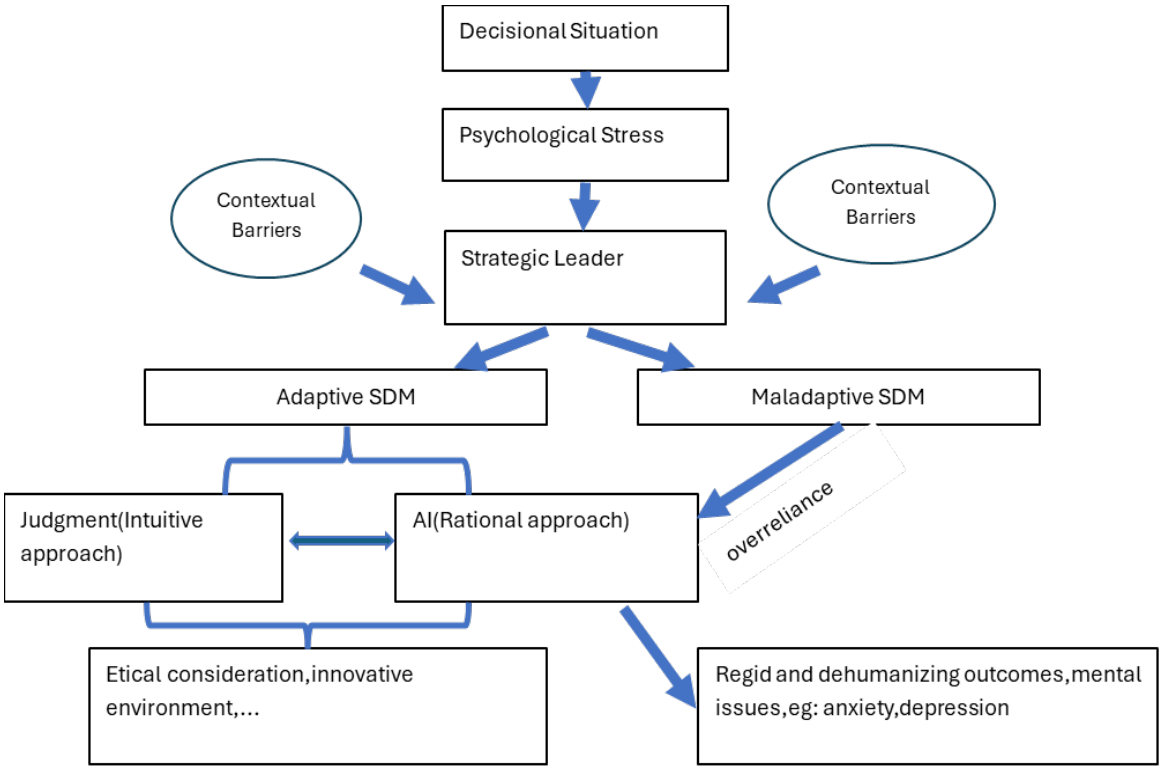

Figure 1. *Model for Strategic Decision-Making based on the use of AI for ethical considerations.*

8. Implications and Limitations

Effective SDM requires the exploitation of the advantageous features of both human capabilities and AI (Trunk et al., 2020). The integration of AI should complement and support managers' decision-making processes to deliver robust results for their organizations (Gabriel et al., 2023). While AI is characterized by its strengths in automating processes and analyzing large volumes of

data, humans or managers in this context step in to focus on tasks requiring judgment, creativity and complex decision-making. Thus, the role of managers remains crucial in challenging ethical and moral considerations on the one hand and re-establishing the role of collaborators to focus on supervising and guiding AI processes towards effective decision-making on the other.

Training leaders using Vincent's (2021) AI-Intuition Integration Framework will improve strategic performance and drive innovation (Calabretta et al., 2017; Thanos, 2023). Senior managers should encourage and support the integration of intuition and rationality in their organizations, by raising awareness of the important contribution of both perspectives in improving decision-making and providing tools to support intuition for rational leaders and rationality for intuitive leaders. This synergy enables leaders to reach decisions with successful outcomes through rational competencies, such as analysis and reasoning, a process that requires some time because it involves high mental capabilities to think about the available alternatives and the possible outcomes on the one hand, and also intuition that feeds on previous experiences, which is very important especially in emergency decisions and uncertainty situations in which the time factor plays a decisive role on the other hand.

The integration of AI and leader's judgment optimizes decision-making while reducing biases and ethical concerns. It also helps address societal fears about AI replacing human jobs by emphasizing collaboration instead of competition. The "human judgment" component of this model can be strengthened and supported to ethically oversee AI-supported decisions, through the framework proposed by Floridi and Cowls (2019), who argue that leaders should adopt a unified set of five key principles: beneficence, non-maleficence, autonomy, justice, and explicability. These principles ensure that AI promotes human well-being, avoids harm, respects individual autonomy, upholds fairness and equity, and remains transparent and accountable. Crucially, leaders must ensure that AI systems are understandable and that clear responsibility is assigned for their outcomes. By integrating these principles, leaders can guide the ethical development, deployment, and oversight of AI technologies in a socially responsible manner.

Let's consider a proposed scenario to illustrate how this model could work. Imagine an organization that is considering the launch of a new technological product in an emerging market. Advanced AI systems analyze macroeconomic data, digital engagement metrics, and competitor behavior, recommending an aggressive market entry strategy. The projections suggest strong profitability and rapid market penetration. However, a local manager, drawing on years of experience and cultural familiarity, raises concerns. While the data points to

opportunity, the region is marked by low digital literacy, limited infrastructure, and deep-rooted concerns about data privacy and foreign tech influence. The manager intuitively senses that an abrupt launch could exploit vulnerable consumer groups and risk violating ethical standards, such as informed consent, equitable access, and respect for cultural values.

In response, the leadership team chooses a more balanced, ethically responsible strategy—guided by both AI-driven insights and human judgment. They opt for a phased deployment, invest in digital education campaigns, and collaborate with local organizations to ensure transparency, inclusiveness, and social accountability. By deliberately combining rational, AI-based insights with intuitive and ethical judgment, the leader demonstrates responsible strategic decision-making. This balanced approach not only improves the accuracy and adaptability of decisions but also ensures alignment with ethical principles, such as fairness, respect, and social responsibility. In doing so, the organization strengthens its reputation, stakeholder trust, and potential for sustainable impact in emerging markets.

9. Conclusion

In conclusion, this paper attempted to highlight the SDM process for managers, focusing on the current opportunities and challenges that influence significantly to the effectiveness of these strategic decisions in organizations. Moreover, it proposes a model that empowers leaders to make use of AI's speed while maintaining ethical integrity through a structured approach to conflict resolution.

AI presents transformative opportunities for organizations by enhancing strategic decision-making, agility, and competitiveness. Through its integration with big data analytics and machine learning, AI enables faster, more accurate decision-making, optimizing processes across sectors—from healthcare to market strategy. It supports real-time planning, improves operational efficiency, and helps anticipate customer needs and emerging trends. The democratization of AI tools has also leveled the playing field, allowing small firms to compete with large corporations by accessing actionable insights once limited to enterprises with extensive resources. By leveraging advanced algorithms, organizations can optimize performance metrics, resource allocation, and innovation strategies. However, to fully exploit AI's potential, leaders must align their strategies and cultures with its use, while ensuring human interpretation, ethical safeguards, and critical judgment remain central to the decision-making process.

Strategic leaders are key drivers of organizational direction, innovation, and resilience in dynamic environments. Operating at the highest levels, they influence culture, guide decision-making, and ensure alignment between internal capabilities and external opportunities. Their role requires coupling long-term vision with operational effectiveness, especially during times of uncertainty. Effective strategic leaders combine emotional intelligence with analytical thinking to shape sustainable decisions and foster adaptive cultures. A clear vision remains the cornerstone of their leadership, enabling organizations to navigate change and remain competitive. Studies across major companies show that visionary leadership, combined with innovation and tailored strategic focus—such as efficiency, empowerment, or reinvention—drives long-term success. Ultimately, strategic leadership empowers organizations to evolve, seize emerging opportunities, and translate vision into measurable impact.

AI enhances strategic decision-making, but its ethical use is crucial. Excessive trust on AI can weaken human judgment, lead to dehumanized outcomes, and raise mental health concerns. Ethical challenges include transparency, fairness, and data privacy, often complicated by cultural differences and the subjective nature of ethics.

Leaders must balance AI insights with human oversight, emotional intelligence, and cultural awareness. Sustainable and ethical AI use requires responsible governance, adaptive structures, and a commitment to values-driven leadership. This paper proposes an integrative theoretical model that draws on conflict theory and the dynamic interplay between rational and intuitive approaches for decision-making. Central to the model is the pivotal role of leadership, aiming to bridge the ethical gap in the application of AI.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Notes on Contributors

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