IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

A Study on the Impact of Artificial Intelligence on Boardroom Decisions and Directors' Liability with Special Reference to Chennai

Gokulapriyan V and Sivakumar N
LLM [CORPORATE LAW], 2nd year
Hindustan Institute of Technology and Science, Chennai, India
gokuladv21@gmail.com and shivakumarnr@gmail.com

Abstract: *Artificial Intelligence (AI) is rapidly transforming corporate governance, particularly in the realm of boardroom decision-making. As companies integrate AI-driven tools for data analysis, risk assessment, and strategic planning, the role of board members is evolving. AI has the potential to enhance decision-making by providing data-driven insights, predicting market trends, and automating routine tasks. The main objective of this study is to analyze the key challenges organizations face in implementing AI in boardroom decisions, including legal uncertainties, data privacy concerns, and resistance to change and to assess the overall impact of AI on decision-making processes, including improvements in speed, accuracy, and strategic planning. The research methodology used here is the descriptive method and the convenient sampling. The sample size is 223 and the sample frame is Chennai. Ultimately, the findings will contribute to the understanding of how organizations can leverage AI responsibly, fostering innovation and improving governance while mitigating potential legal repercussions for directors. This study underscores the importance of balancing technological advancement with ethical considerations and accountability in the corporate landscape. This study concludes that as AI continues to evolve, proactive measures will be essential in balancing technological innovation with corporate responsibility, ensuring that AI-driven decisions contribute to sustainable business growth and ethical governance*

Keywords: Artificial Intelligence, Boardroom Decisions , Directors' Liability, Corporate Governance, Data Analysis, Ethical Considerations

I. INTRODUCTION

Artificial Intelligence (AI) is rapidly transforming corporate governance, particularly in the realm of boardroom decision-making. As companies integrate AI-driven tools for data analysis, risk assessment, and strategic planning, the role of board members is evolving. AI has the potential to enhance decision-making by providing data-driven insights, predicting market trends, and automating routine tasks. The main aim of this paper is to determine the effectiveness of AI in enhancing corporate governance and directors' accountability, focusing on how it influences risk management and ethical decision-making.

AI's role in boardroom decisions has evolved from basic data processing to advanced decision-making tools. Initially used for automating routine tasks and generating reports, AI now provides predictive analytics, scenario modelling, and strategic insights. It helps leaders assess risks, forecast trends, and make data-driven decisions, reducing human biases and improving efficiency. AI-powered tools offer real-time data analysis, allowing executives to respond quickly to market changes and optimise corporate strategies, making AI an essential part of modern boardroom decision-making.

Governments worldwide are introducing initiatives to regulate AI and address director's liability in its use. These include establishing ethical guidelines, promoting AI research, and implementing frameworks to ensure transparency and accountability. Directors are increasingly held liable for the ethical deployment of AI, with responsibilities to oversee risk management and ensure compliance with data privacy, cybersecurity, and regulatory standards. In the

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429 Volume 5, Issue 4, November 2025 Impact Factor: 7.67

event of AI failures or ethical violations, directors could face legal consequences, making AI governance a key corporate responsibility.

Several factors influence the impact of AI on boardroom decisions and directors' liability. These include the accuracy and reliability of AI systems, as poor performance could lead to flawed decisions. Regulatory compliance is critical, as directors must ensure AI use aligns with laws on data privacy, ethics, and accountability. Additionally, cybersecurity risks from AI misuse pose liabilities. Human oversight remains essential, as directors must balance AI-driven insights with ethical considerations, ensuring transparent and responsible decision-making while mitigating risks.

Key trends in the impact of AI on boardroom decisions and directors' liability include the increasing adoption of AI-driven analytics to enhance decision-making, offering predictive insights and risk assessment. There's growing emphasis on AI governance, with frameworks to ensure ethical use and compliance with regulations. Cybersecurity concerns are prompting boards to prioritize data protection and AI system integrity. Additionally, AI transparency is gaining importance, as directors are held accountable for understanding and overseeing AI's role, minimizing risks of liability.

In the USA, AI adoption in boardrooms is widespread, with well-established governance frameworks and strict regulations on data privacy, such as CCPA, and cybersecurity. Directors are held highly accountable for AI-driven decisions, facing significant liabilities, especially in ensuring compliance with federal regulations and ethical AI use. In contrast, India is gradually advancing in AI adoption, with government initiatives like the National AI Strategy. However, regulatory frameworks are still evolving, and director liability is less stringent, though growing as AI integration increases in corporate governance.

OBJECTIVES

- To analyze the key challenges organizations face in implementing AI in boardroom decisions, including legal uncertainties, data privacy concerns, and resistance to change.
- To Assess the overall impact of AI on decision-making processes, including improvements in speed, accuracy, and strategic planning.
- To determine the effectiveness of AI in enhancing corporate governance and directors' accountability, focusing on how it influences risk management and ethical decision-making.

II. LITERATURE REVIEW

Jingchen Zhao (2024), This paper explores how accountable AI can benefit corporate boardrooms and the role of regulation in promoting accountability. It examines the relationship between AI, board decisions, legal risks, and regulatory frameworks to mitigate risks while enhancing governance. The article advocates for a smart regulatory approach involving multidisciplinary teams to ensure the safe and sustainable use of AI in corporate settings. **AASHIRWA BABURAJ,** Given the economic instability from the COVID-19 pandemic, directors are tasked with complex decisions to sustain their businesses. AI, rapidly growing in influence, is poised to enter corporate boardrooms. This paper examines the legal permissibility, safeguards, and impact of AI on corporate governance, focusing on India. Through doctrinal and analytical methods, it assesses AI's integration in boardrooms, evaluates its viability, and explores the advantages, limitations, and potential conflicts, offering recommendations. **Lee (2021),** This paper explores the integration of AI into boardrooms, emphasizing the role of law and regulation. It argues that AI can address corporate short-termism by aiding boards in considering societal interests through rapid, unbiased data processing. AI can offer guidance free from shareholder and board biases. The paper suggests revising company law to mitigate legal risks and encourage AI use in achieving ESG goals. **Eroğlu (2022),** This article explores the emerging role of AI in corporate governance, noting discussions on its potential as a decision-maker, despite not being legally recognized as a director. While examples like the robot director Vital exist, AI's influence on board decisions remains debated. The article examines AI's potential impact on corporate board gender diversity policies, considering three scenarios: AI as a board member, an enabler assisting decision-makers, or a tool for selecting board members. **Möslein, F. (2018),** This chapter examines the relationship between artificial intelligence (AI) and corporate law, analyzing

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429 Volume 5, Issue 4, November 2025 Impact Factor: 7.67

whether current rules align with AI's challenges or require adaptation. It focuses on the role of corporate directors, questioning how much they should rely on AI and whether AI could eventually replace human directors. The paper highlights that current legal frameworks are designed for human directors, raising concerns about their suitability for AI-driven boardrooms. It concludes that while corporate law remains relevant, it must evolve to address the dynamic challenges posed by AI in corporate governance. **Ahdadou, M.(2024)** Recent advances in artificial intelligence (AI) have sparked growing interest in its applications within corporate governance, particularly in the form of augmented intelligence. Also known as advisory intelligence, augmented intelligence enhances human capabilities by fostering collaboration between AI and board members. This study explores the suitability of augmented intelligence for corporate boards, allowing AI to support decision-making without replacing human directors. It contrasts this approach with autonomous AI systems that could potentially replace humans and assesses how augmented intelligence improves decision-making, while also addressing related risks and challenges. **P. Bhattacharya (2018),** Artificial Intelligence (AI) has recently moved from academic research to commercial application, sparking interest across academia and industry. This paper investigates the use of AI in strategic decision-making by training AI systems to become active contributors within organizations' C-level boards. It introduces a new AI-enabled strategic decision-making model, synthesized from existing literature on AI and strategy. The paper also proposes testing this model empirically through various case studies, offering a practical opportunity to explore its effectiveness in organizational settings. **Di Prisco, D. (2024),** Artificial intelligence (AI) is a transformative technology that is already significantly impacting society, the economy, and businesses. However, its future developments and long-term effects remain largely uncertain. This article explores AI's potential benefits and challenges for corporate governance mechanisms, with a particular emphasis on the role of the board of directors. **Sklavos, G. (2024)** This research examines the integration of artificial intelligence (AI) with environmental, social, and governance (ESG) factors and its impact on corporate governance. Using bibliometric analysis of 205 publications from the Scopus database, the study highlights the need to digitize the boardroom with AI while ensuring security. CEOs must prioritize transparency and cybersecurity to mitigate risks and build trust in business operations. **Robert E. Morgan (2024)**, Despite the increasing influence of artificial intelligence (AI) on business, research on its effects on firm idiosyncratic risk (IR) is limited. This study examines how AI and board interlocks affect IR, focusing on the diversity of board networks. We hypothesize that a firm's AI exposure and board ties influence market risk perceptions. Our findings suggest that while AI and network diversity generally reduce risk, firms in high-AI industries may experience increased IR due to their advanced technological status. **Kumar, S. (2024)** Integrating artificial intelligence (AI) into corporate management has significant implications for governance. This article explores how AI can streamline decision-making, enhance risk management, and improve stakeholder engagement. By enabling boards and leaders to make informed choices through intelligent data analysis, AI also facilitates compliance and boosts transparency, fostering a culture of accountability. However, challenges such as ethical dilemmas, data privacy, and algorithmic bias must be addressed. Establishing robust governance rules is crucial to balance innovation with ethical standards, ensuring trust and accountability among stakeholders. **Fosch-Villaronga, E. (2022),** The rise of autonomous AI in corporate governance presents legal challenges, particularly regarding liability and responsibility. This chapter introduces autonomy levels for AI in boardrooms and examines corporate law implications, drawing on examples from other sectors. A six-layered model illustrates shifting roles between human directors and AI. It highlights concerns over accountability as decision-making increasingly shifts from humans to AI systems. **Bora Çınar, S. (2021),** This chapter examines the intersection of artificial intelligence (AI) and corporate law, analyzing whether current legal frameworks can address AI's challenges in boardrooms. It explores the extent to which human directors should rely on or be replaced by AI and assesses the legal admissibility of such replacements. The chapter concludes that corporate law must adapt to AI's evolving role in governance. **Baran Can (2022),** This article explores the growing role of artificial intelligence (AI) in corporate governance, examining how AI can support or even replace human decision-making in boardrooms. It discusses the potential positive and negative impacts of AI integration in companies and outlines precautions to address possible risks, highlighting both the opportunities and challenges posed by AI in corporate decision-making. **Gómez Fariñas, B. (2023)** Artificial intelligence (AI) presents both opportunities and risks in addressing corporate sustainability challenges. While AI can help solve complex environmental and social problems, it also introduces risks like bias and ethical conflicts. This article advocates for a

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429 Volume 5, Issue 4, November 2025 Impact Factor: 7.67

collective effort by companies and governments to establish a proactive, risk-based regulatory framework. Such regulation should ensure AI's sustainable and ethical use, balancing technological neutrality with accountability to promote the common good. **Nguyen TTB (2024)** This study examines the impact of board diversity on corporate performance using data from 853 electronic companies on the Taiwan Stock Exchange (2000–2021). It combines multi-breaks models and artificial neural networks (ANNs) to assess performance factors. The results show that higher percentages of female board members improve company performance, particularly under favorable business conditions. Conversely, male board members positively influence performance in extreme conditions, while independent directors have minimal impact on profitability. Increased financial leverage is linked to reduced profitability. **B. Thuraisingham (2020)** Since the Enron scandal, corporate governance has gained significant attention, leading to policies like Sarbanes-Oxley. Today, with corporations widely adopting Artificial Intelligence (AI) and Data Science (DS) across industries, it is essential to reevaluate the roles and responsibilities of corporate officers and boards in governing AI and DS operations. This paper explores the challenges and potential governance responsibilities for corporate leaders overseeing AI and DS initiatives. **Mertens (2023)** This paper examines the growing role of AI in corporate governance, highlighting its potential to improve decision-making and challenge traditional practices like groupthink. Despite its benefits, corporate laws remain centered on human decision-makers, raising legal uncertainties that may deter AI adoption. The paper analyzes AI's autonomy in governance, focusing on key legal issues such as AI's delegation of decision rights, human oversight, and liability for algorithmic failures in corporate settings. **Zekos, G.I. (2021),** Artificial intelligence is driving economic growth and transforming industries by modernizing production, distribution, and consumption. Combined with blockchain, it enables decentralized token economies where revenue is allocated to value creators. This integration is reshaping economic and social life, introducing new ways of interaction between people and AI agents, signaling a shift toward a new economic paradigm. **Umakanth (2022)** The expanding use of AI in corporate governance has benefits like improving board appointments and monitoring, but it also presents risks such as privacy issues, lack of transparency, and concentration of power. This paper explores a disclosure-based regulatory approach, examining whether boards should disclose AI usage in decision-making. Such transparency could mitigate risks while allowing innovation, potentially leading to a targeted disclosure regime addressing AI's role in corporate governance.

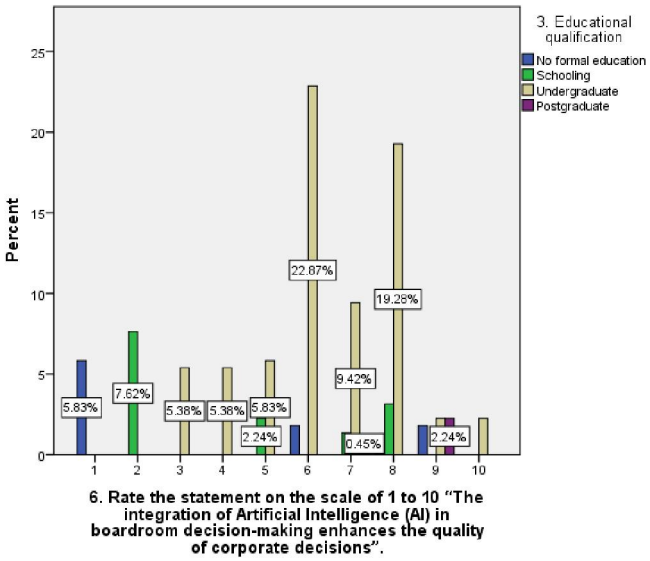
III. METHODOLOGY

The research method followed here is empirical . A total of 223 samples have been collected through a convenient sampling method .The sample frame taken here is in chennai. The datas were also collected through the circulated google forms . The independent variables are the age , education qualification , employment status . The dependent variables are challenges , impacts and effectiveness of AI on boardroom decisions and the liabilities of directors . The statistical tools used for analysis are complex bar charts , chi square using SPSS

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

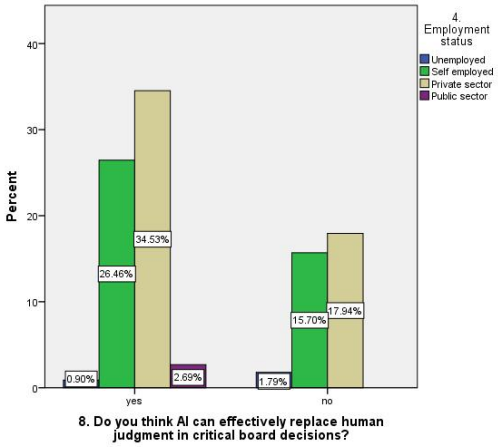
IV. ANALYSIS

FIGURE 1



LEGEND : Figure 1 represents the rating and the educational qualification

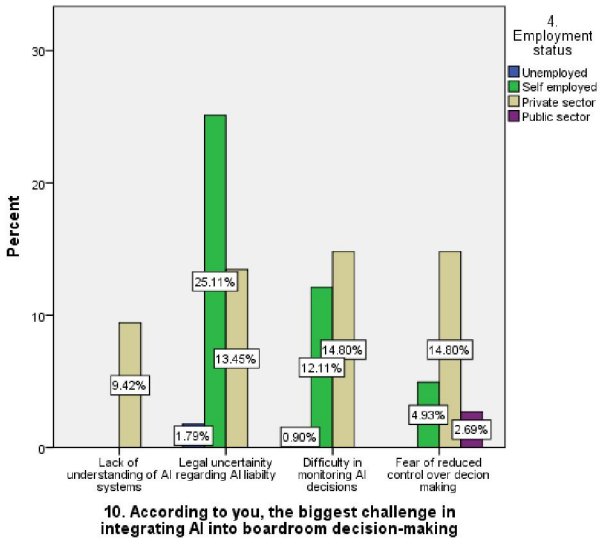
FIGURE 2



LEGEND : Figure 2 represents the human judgement and the employment status

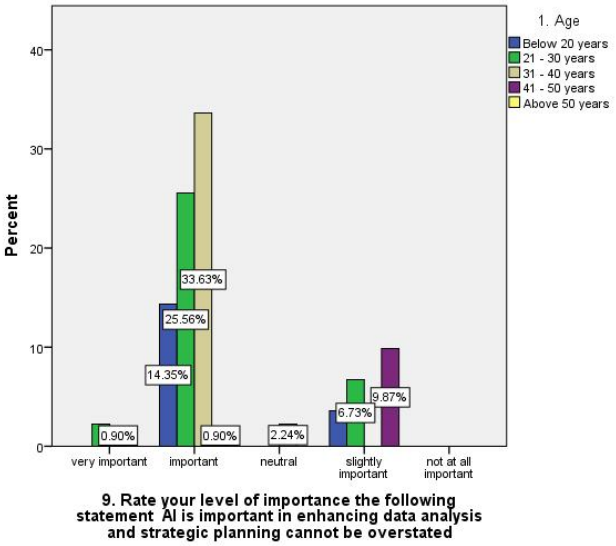
IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

FIGURE 3



LEGEND : Figure 3 represents the challenges and the employment status

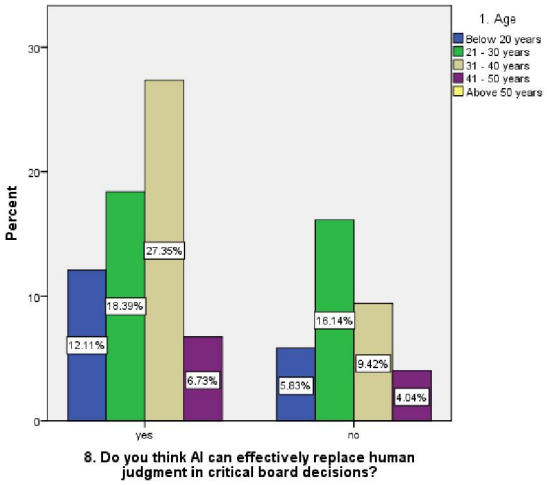
FIGURE 4



LEGEND : FIGURE 4 represents the importance and the age

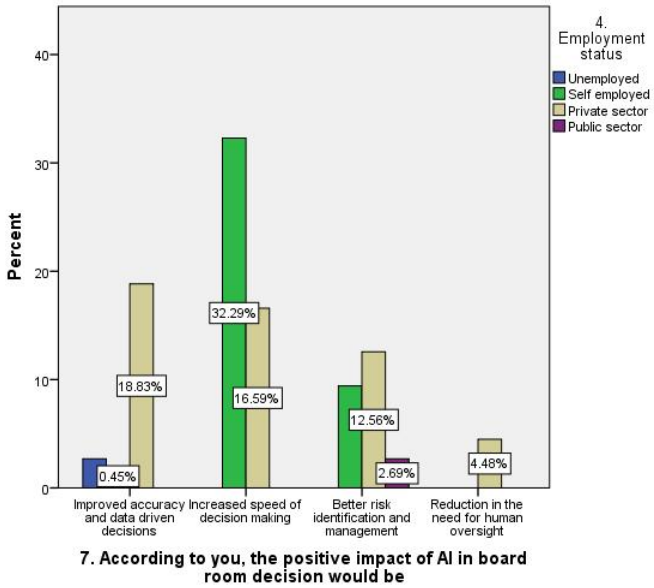
IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

FIGURE 5



LEGEND : Figure 5 represents the human judgement and the age

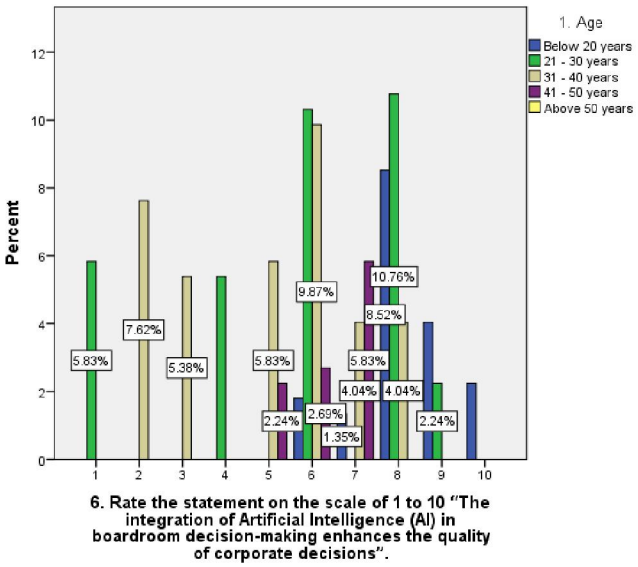
FIGURE 6



LEGEND : FIGURE 6 represents the positive impact and the employment status

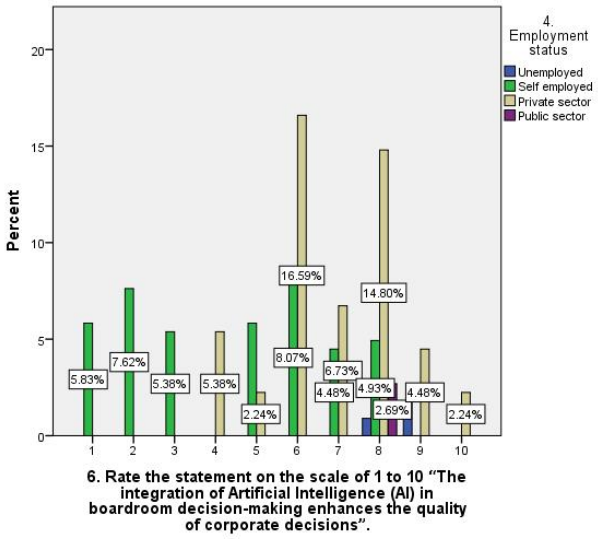
IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

FIGURE 7



LEGEND : Figure 7 represents the rating and the educational qualification

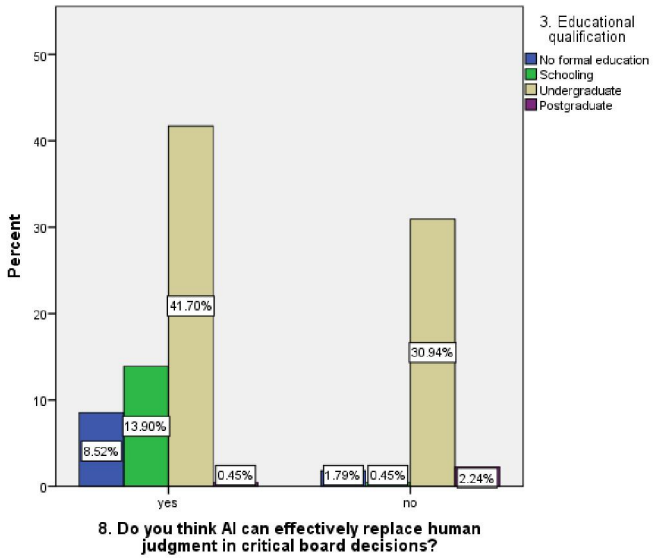
FIGURE 8



LEGEND : Figure 8 represents the rating and the educational qualification

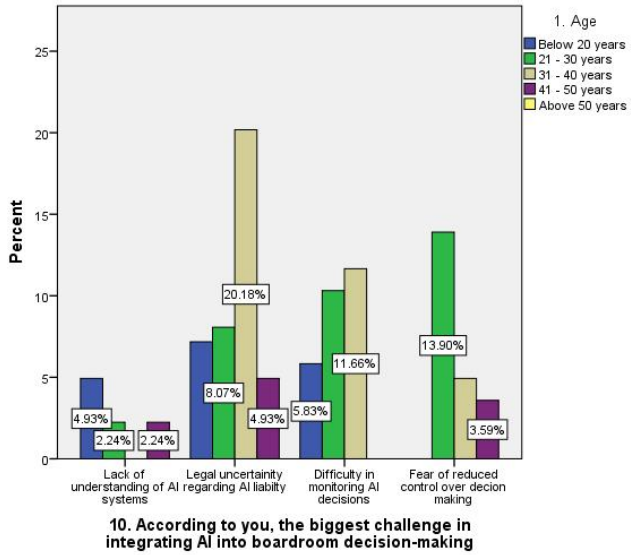
IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

FIGURE 9



LEGEND : Figure 9 represents the human judgement and the age

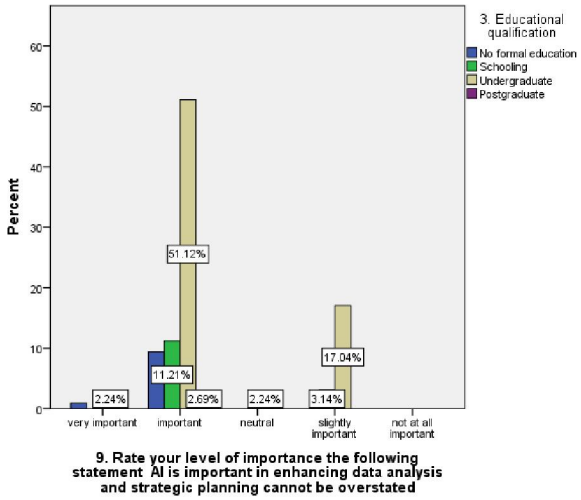
FIGURE 10



LEGEND : Figure 10 represents the challenges and the employment status

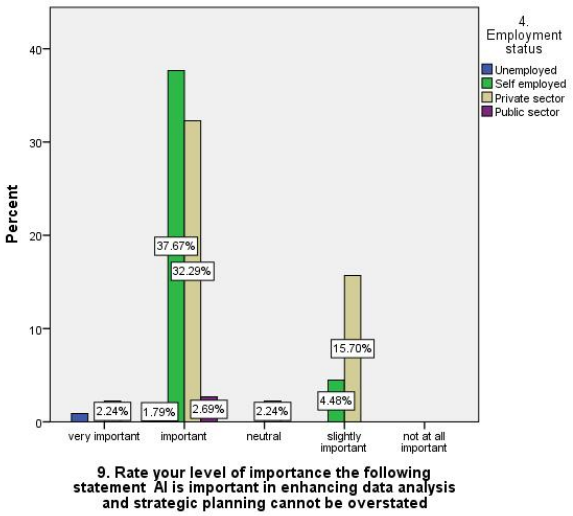
IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

FIGURE 11



LEGEND : FIGURE 11 represents the importance and the age

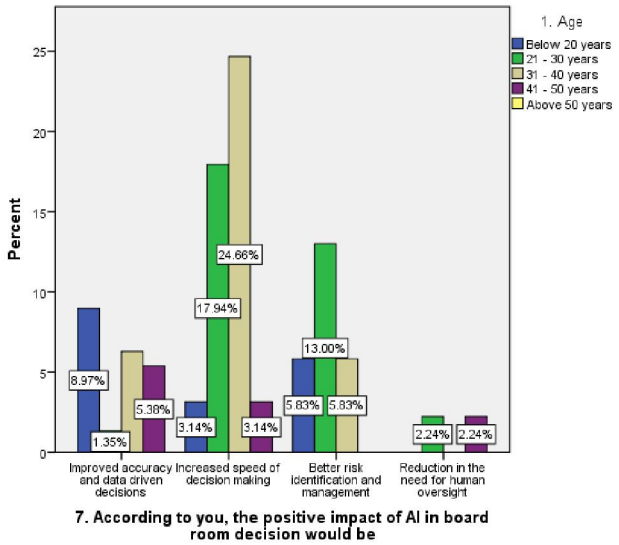
FIGURE 12



LEGEND : FIGURE 12 represents the importance and the age

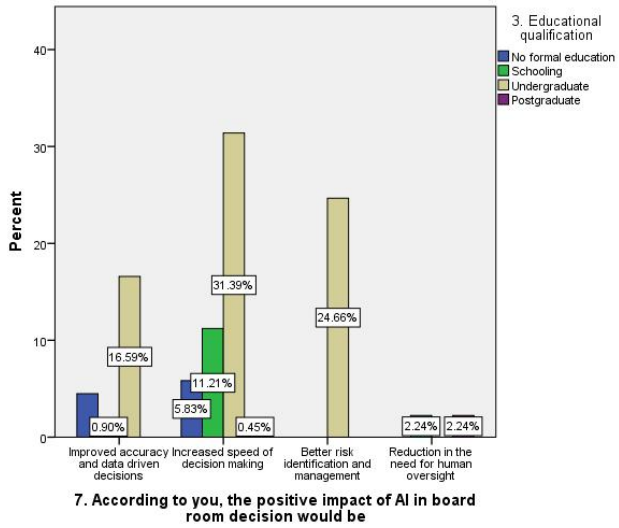
IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

FIGURE 13



LEGEND : FIGURE 13 represents the positive impact and the employment status

FIGURE 14



LEGEND : FIGURE 14 represents the positive impact and the employment status

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

TABLE 1

Null hypothesis : There is no significant association between the challenges in AI and the employment status of the respondents

Alternate hypothesis : There is significant association between the challenges in AI and the employment status of the respondents

4. Employment status * 10. According to you, the biggest challenge in integrating AI into boardroom decision-making Crosstabulation

Count

		10. According to you, the biggest challenge in integrating AI into boardroom decision-making				
		Lack of understanding of AI systems	Legal uncertainity regarding AI liabilty	Difficulty in monitoring AI decisions	Fear of reduced control over decion making	Total
4. Employment status	Unemployed	0	4	2	0	6
	Self employed	0	56	27	11	94
	Private sector	21	30	33	33	117
	Public sector	0	0	0	6	6
Total		21	90	62	50	223

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	63.139[a]	9	.000
Likelihood Ratio	69.719	9	.000
Linear-by-Linear Association	7.149	1	.008
N of Valid Cases	223		

a. 8 cells (50.0%) have expected count less than 5. The minimum expected count is .57.

LEGEND : Table 1 uses chi square to test whether association between the challenges in AI and the employment status of the respondents

TABLE 2

Null hypothesis : There is no significant association between the impact of AI and the employment status of the respondents

Alternate hypothesis : There is significant association between the impact of AI and the employment status of the respondents

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

1. Age * 7. According to you, the positive impact of AI in board room decision would be Crosstabulation

Count

		7. According to you, the positive impact of AI in board room decision would be				
		Improved accuracy and data driven decisions	Increased speed of decision making	Better risk identification and management	Reduction in the need for human oversight	Total
1. Age	Below 20 years	20	7	13	0	40
	21 - 30 years	3	40	29	5	77
	31 - 40 years	14	55	13	0	82
	41 - 50 years	12	7	0	5	24
Total		49	109	55	10	223

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	86.134[a]	9	.000
Likelihood Ratio	92.547	9	.000
Linear-by-Linear Association	.625	1	.429
N of Valid Cases	223		

a. 4 cells (25.0%) have expected count less than 5. The minimum expected count is 1.08.

Table 2 uses chi square to test whether association between the positive impact of AI and the age of the respondents

V. RESULTS

In **Figure 1** most of the UG respondents (22.87%) have rated 6 out of 10 for the statement that AI can enhance decision making. In **figure 2** most of the private sector respondents (34%) have responded yes for the replacement of AI over human judgement. In **figure 3** most of the self employed respondents (25%) have responded to legal uncertainty regarding AI liability. In **figure 4**, most of the respondents belonging to the 31 - 40 years have responded that it is important in enhancing data analysis. In **figure 5** most of the respondents of the age group 31 - 40 have responded yes for the replacement of AI over human judgement. In **Figure 6** ,most of the respondents have responded that increased speed in decision making is the positive impact of AI. In **Figure 7** most of the respondents of the age group 21 - 30 years have rated 8 out of 10 for the statement that AI can enhance decision making.In **Figure 8** most of the respondents of the age group 21 - 30 years have rated 8 out of 10 for the statement that AI can enhance decision making. In **figure 9** most of the UG respondents responded yes for the replacement of AI over human judgement. In **figure 10** most of the respondents belonging to age group 31 - 40 years have responded that legal uncertainty regarding AI liability. In **figure 11,** most of the UG respondents have responded that it is important in enhancing data analysis. In **figure 12**, most of the self employed respondents have responded that it is important in enhancing data analysis. In **Figure 13**,most of the respondents have responded that increased speed in decision making is the positive impact of AI. In **Figure 14**,most of the respondents have responded that increased speed in decision making is the positive impact of AI.

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429 Volume 5, Issue 4, November 2025 Impact Factor: 7.67

DISCUSSION

A rating of 6 out of 10 from most respondents suggests that while there is moderate confidence in AI's ability to enhance corporate decisions, there are reservations. These could stem from concerns about AI's current limitations, such as its lack of context-specific understanding, ethical implications, or the need for stronger regulatory frameworks. It indicates that, while AI is seen as beneficial, there is still a need for improvement in its integration and trustworthiness in high-level decision-making **(Fig 1, 7,8)**

The majority of respondents agreeing that AI can effectively replace human judgment in corporate decisions indicates strong confidence in AI's capabilities. This suggests that AI is seen as capable of making data-driven, objective decisions, reducing human bias, and improving efficiency. However, this viewpoint might overlook the importance of human intuition, ethical considerations, and emotional intelligence in certain complex or nuanced business situations, where human oversight and judgment remain critical. Balancing AI with human input is still essential. **(Fig 2, 5,9)**

The biggest challenge in the integration of AI in corporate decision-making is the legal uncertainty surrounding AI liability. As organizations increasingly rely on AI systems for critical decisions, the lack of clear legal frameworks raises questions about accountability when AI outcomes lead to errors or ethical breaches. This ambiguity complicates the responsibilities of directors and managers, as they may face potential liability for decisions made by AI without clear guidelines on how to attribute responsibility. Establishing comprehensive regulations that define AI liability is crucial to mitigate risks and foster trust in AI technologies.**(fig 3, 10)**

The importance of AI in data analysis and strategic planning cannot be overstated. AI technologies enable organizations to process vast amounts of data quickly and accurately, uncovering insights that drive informed decision-making. By leveraging machine learning algorithms, businesses can identify patterns, forecast trends, and evaluate scenarios more effectively than traditional methods. This capability enhances strategic planning by allowing companies to make proactive decisions, optimize resource allocation, and improve operational efficiency. AI empowers organizations to stay competitive in a rapidly changing market landscape, making it an essential tool for modern business success. **(Fig 4,11,12)**

AI has positively impacted the speed of decision-making in organizations by automating data processing and analysis, allowing leaders to access real-time insights quickly. With AI tools, businesses can analyze large datasets in minutes, identifying trends and patterns that would take humans much longer to discern. This accelerated analysis enables companies to respond swiftly to market changes, customer needs, and operational challenges, fostering a more agile business environment. As a result, organizations can make informed decisions faster, enhancing their competitiveness and adaptability in today's dynamic market landscape.**(fig 6)**

LIMITATION OF THE STUDY

The major limitation of the study was the time limit . The samples were collected in a limited frame of time .

VI. CONCLUSION

The integration of artificial intelligence (AI) into boardroom decisions represents a transformative shift in corporate governance, offering both significant opportunities and challenges. AI enhances decision-making by providing rapid data analysis, predictive insights, and improved accuracy, thereby enabling directors to make more informed and timely strategic choices. The main objective of this study is to analyze the key challenges organizations face in implementing AI in boardroom decisions, including legal uncertainties, data privacy concerns, and resistance to change and to assess the overall impact of AI on decision-making processes, improvements in speed, accuracy, and strategic planning. The finding suggests will contribute to the understanding of how organizations can leverage AI responsibly, fostering innovation and improving governance while mitigating potential legal repercussions for directors. This study underscores the importance of balancing technological advancement with ethical considerations and accountability in the corporate landscape. It is suggested that, as AI systems become more prevalent, directors must navigate the complexities of legal frameworks that define their responsibilities in the context of AI-generated decisions. The potential for legal uncertainty regarding directors' liability in AI use necessitates the establishment of clear guidelines and frameworks that address accountability and compliance. Boards must be proactive in understanding the

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429 Volume 5, Issue 4, November 2025 Impact Factor: 7.67

implications of AI, ensuring transparency and ethical usage while minimizing biases inherent in AI algorithms. Furthermore, ongoing training and education on AI technologies will be essential for directors to effectively oversee AI implementations and mitigate risks associated with its use. Ultimately, the successful adoption of AI in the boardroom hinges on a balanced approach that leverages technological advancements while upholding ethical standards and regulatory compliance. By fostering a culture of responsible AI usage, organizations can enhance their governance practices, drive innovation, and ultimately achieve sustainable growth. As the corporate landscape continues to evolve, the intersection of AI, boardroom decisions, and directors' liability will remain a critical area for research and practice, shaping the future of corporate governance.

REFERENCES

[1]. Jingchen Zhao, Promoting more accountable AI in the boardroom through smart regulation, Computer Law & Security Review, Volume 52, 2024, ISSN 0267-3649, https://doi.org/10.1016/j.clsr.2024.105939.

[2]. AASHIRWA BABURAJ, ARTIFICIAL INTELLIGENCE V. INTUITIVE DECISION MAKING: HOW FAR CAN IT TRANSFORM CORPORATE GOVERNANCE?, vol 8

[3]. Lee, Joseph and Underwood, Peter, AI in the Boardroom: Let the Law be in the Driving Seat (June 26, 2021). International and Comparative Corporate Law Journal, The University of Manchester Legal Research Paper Series No. Forthcoming, Available at SSRN: https://ssrn.com/abstract=3874588 or http://dx.doi.org/10.2139/ssrn.3874588

[4]. Eroğlu, M., Karatepe Kaya, M. Impact of Artificial Intelligence on Corporate Board Diversity Policies and Regulations. Eur Bus Org Law Rev 23, 541–572 (2022). https://doi.org/10.1007/s40804-022-00251-5

[5]. Möslein, F. (2018). "Chapter 25: Robots in the boardroom: artificial intelligence and corporate law". In Research Handbook on the Law of Artificial Intelligence. Cheltenham, UK: Edward Elgar Publishing. Retrieved Oct 17, 2024, from https://doi.org/10.4337/9781786439055.00039

[6]. Ahdadou, M., Aajly, A. & Tahrouch, M. Unlocking the potential of augmented intelligence: a discussion on its role in boardroom decision-making. Int J Discl Gov 21, 433–446 (2024). https://doi.org/10.1057/s41310-023-00207-2

[7]. P. Bhattacharya, "Artificial Intelligence in the Boardroom: Enabling 'Machines' to 'Learn' to Make Strategic Business Decisions," 2018 Fifth HCT Information Technology Trends (ITT), Dubai, United Arab Emirates, 2018, pp. 170-174, doi: 10.1109/CTIT.2018.8649550.

[8]. Agnese, P., Arduino, F.R. and Di Prisco, D. (2024), "The era of artificial intelligence: what implications for the board of directors?", Corporate Governance, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/CG-06-2023-0259

[9]. Sklavos, G.; Theodossiou, G.; Papanikolaou, Z.; Karelakis, C.; Ragazou, K. Environmental, Social, and Governance-Based Artificial Intelligence Governance: Digitalizing Firms' Leadership and Human Resources Management. Sustainability 2024, 16, 7154. https://doi.org/10.3390/su16167154

[10]. Industry Exposure to Artificial Intelligence, Board Network Heterogeneity, and Firm Idiosyncratic Risk Kerry Hudson, Robert E. Morgan First published: 19 July 2024 https://doi.org/10.1111/joms.13127

[11]. Kumar, S. (2024). INTEGRATING ARTIFICIAL INTELLIGENCE (AI) into CORPORATE GOVERNANCE SYSTEMS. EDPACS, 1–24. https://doi.org/10.1080/07366981.2024.2405151

[12]. Drukarch, H., Fosch-Villaronga, E. (2022). The Role and Legal Implications of Autonomy in AI-Driven Boardrooms. In: Custers, B., Fosch-Villaronga, E. (eds) Law and Artificial Intelligence. Information Technology and Law Series, vol 35. T.M.C. Asser Press, The Hague. https://doi.org/10.1007/978-94-6265-523-2_18

[13]. Möslein, F., & Bora Çınar, S. (2021). Robots in the Boardroom: Artificial Intelligence and Corporate Law. Istanbul Law Review, 79(2), 699-728. https://doi.org/10.26650/mecmua.2021.79.2.0004

[14]. Kaya, Baran Can, The Role of Artificial Intelligence In Corporate Governance (June 22, 2022). Available at SSRN: https://ssrn.com/abstract=4143846 or http://dx.doi.org/10.2139/ssrn.4143846

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

[15]. Zhao, J., Gómez Fariñas, B. Artificial Intelligence and Sustainable Decisions. Eur Bus Org Law Rev 24, 1–39 (2023). https://doi.org/10.1007/s40804-022-00262-2

[16]. Yang L-W, Nguyen TTB, Young W-J. Performance and Board Diversity: A Practical AI Perspective. Big Data and Cognitive Computing. 2024; 8(9):106. https://doi.org/10.3390/bdcc8090106

[17]. B. Thuraisingham, "Artificial Intelligence and Data Science Governance: Roles and Responsibilities at the C-Level and the Board," 2020 IEEE 21st International Conference on Information Reuse and Integration for Data Science (IRI), Las Vegas, NV, USA, 2020, pp. 314-318, doi: 10.1109/IRI49571.2020.00052.

[18]. Mertens, Floris, The Use of Artificial Intelligence in Corporate Decision-Making at Board Level: A Preliminary Legal Analysis (January 27, 2023). Financial Law Institute Working Paper Series 2023-01, Available at SSRN: https://ssrn.com/abstract=4339413 or http://dx.doi.org/10.2139/ssrn.4339413

[19]. Zekos, G.I. (2021). AI Risk Management. In: Economics and Law of Artificial Intelligence. Springer, Cham. https://doi.org/10.1007/978-3-030-64254-9_6

[20]. Kamalnath, Akshaya and Varottil, Umakanth, A Disclosure-Based Approach to Regulating AI in Corporate Governance (January 7, 2022). NUS Law Working Paper No. 2022/001, Available at SSRN: https://ssrn.com/abstract=4002876 or http://dx.doi.org/10.2139/ssrn.4002876