ISSN 2663-127X
Vol. 5, Iss. 1 (2024), pp 473 – 482, October 24, 2024. www.reviewedjournals.com, ©Reviewed Journals

ORGANIZATIONAL LEADERSHIP ON ARTIFICIAL INTELLIGENCE (AI) EFFECT ON STRATEGIC DECISION-MAKING IN THE DIGITAL ERA AT AIRTEL KENYA

Noah Wesonga Kakai [1], & Dr. Abel Anyieni, PhD [2]

[1] Postgraduate Student, MBA in Strategic Management, Kenyatta University, Kenya
[2] Lecturer, School of Business, Economics and Tourism at Kenyatta University, Kenya

Accepted: October 11, 2024

DOI: https://doi.org/10.61426/business.v5i1.257

ABSTRACT

Telecommunication companies play a significant role in information sharing and easing transactions. This is important in improvement of the country's socio-economic growth and development. However, one of the key players in the sector -Airtel Kenya has reported declining performance, slowed down growth and stagnation. This led to researching on use of artificial intelligence by organizational leaders and its impact on strategic decision-making. The focus era was the digital era and the Airtel Kenya. Through a descriptive research design and targeting respondents working at the regional offices in Nairobi City County, who filled the structured questionnaires. The analyzed data revealed that respondents had strong agreements on role of organizational leadership in encouraging use of AI and impact on strategic decision for the success of Airtel Kenya. The findings show that leadership behaviors such as fostering innovation, providing support, and championing AI initiatives are positively associated with effective AI integration. Organizational leadership on AI accounted for 98.6% change in strategic decision-making processes at Airtel. There was positive and significant impact of organizational leadership on AI at ($\beta = 0.600$, $p < 0.001$) and strategic decision making. The drawn conclusions show that effective leadership is paramount for the effective adoption and utilization of AI technologies in strategic decision-making.

Keywords: *Organizational Leadership, Adaptability of AI, Strategic Decision-making, Efficient Decisions*

CITATION: Kakai, N. W., & Anyieni, A. (2024). Organizational leadership on artificial intelligence (AI) effect on strategic decision-making in the digital ERA at Airtel Kenya. *Reviewed Journal International of Business Management*, 5 (1), 473 – 482. https://doi.org/10.61426/business.v5i1.257

INTRODUCTION

The strategic decision-making is a cornerstone of organizational success, and especially in multinational corporations where any decision made, has far-reaching implications. The organizations that have global presence face complex issues including technological disruption, geopolitical uncertainties and saturation of the market; hence necessitating the strategic foresight and agility in decision-making processes (Bokhari & Myeong, 2022). The companies that have global presence like Amazon and Walmart utilize data-driven analytics and artificial intelligence (AI) algorithms to optimize supply chain management, pricing strategies, and customer engagement initiatives. Arakpogun, Elsahn, Olan and Elsahn (2021) stated that government and institutional capacity factors can either impede the flourishing of AI or cause its success, linked to capacity to make better decisions and outcomes. Use of AI is thought to help navigate such as inadequate infrastructure, regulatory complexities, and market fragmentation to make in-roads in adoption and use of artificial intelligence. The successes and outcomes are made easier when using artificial intelligence to model processes for expected outcome (Benbya, Nan, Tanriverdi & Yoo, 2020).

Owuor (2018) shared that with a growing economy and a vibrant entrepreneurial ecosystem, organizations should be able to balance out the market demands and global trends. Biallas and O'Neill (2020) shared that use of technologies in emerging markets and economies, assists in surmounting challenges associated with providing services to rural and economically disadvantaged consumers. Successful adoption and utilization of advancing technologies such as AI is based on partnering and forming alliances between local entrepreneurs and global tech firms. The leaders in these organizations must seek means of linking hands, building capacities and applying concepts of data analytics in the decision -making process. The leadership is at the core of surmounting challenges in AI scalability in strategic decision-making including data privacy concerns, talent shortages, and infrastructure limitations (Borges, Laurindo, Spínola, Gonçalves, & Mattos, 2021).

The leaders are tasked with setting and delivery of goals. This is attainable by leaders' setting initiatives, shaping the strategic direction, creating culture for innovativeness and proper management of resources. To use AI in strategic decision-making, the leaders must empower and encourage acquisition of new knowledge in work teams (Chui, Yee, Hall & Singla, 2023). Use of AI enable the leaders to synthesize trends that give insights and make fact-based decisions. Kudyba, Fjermestad and Davenport (2020) noted that AI adoption in organizations, needs leaders displaying creativity, competency, adaptability and diversity to accommodate and encourage use of advancing technologies in the firms. The AI technology is interlinked to long-term organizational goals and strategic planning for meeting and exceeding the set outcomes.

The expectation is that leaders who encourage adoption of AI gain in aspects of better decisions that yield greater outcomes. According to Bokhari and Myeong (2022) strategic decision-making is characterized by the pivotal activities undertaken by top-level executives to allocate resources, set goals, and define competitive strategies for long-term success. Additionally, strategic decision-making, where managers continuously gather information, evaluate alternatives, and adjust strategies in response to changing market conditions and competitive pressures (Tong-On, Siripipatthanakul & Phayaphrom, 2021). Some of the common measures of strategic decision-making include speed in the decision-making processes (Oredo & Dennehy, 2022); it is also about accurate, faster and comprehensive decisions (Nauhaus, Luger & Raisch, 2021) and integrated decisions between artificial and human intelligence for economic and social development. Shani, Awino, Ogutu and Iraki (2022) conceptualized strategic decision making in terms of quality of the decisions leading to high performance outcomes.

In seeking to improve success levels at Airtel Kenya through strategic decision-making. The strategic decisions, are informed choices and decisions free of bias and assumptions, Karuga, Wairimu and Yatich (2023) noted that they result in driving firms to sustainable growth and success. Therefore, strategic decision-making at Airtel Kenya is conceptualized as speed, efficiency, accuracy and flexibility of the decisions made by the leaders and managers of the firm.

Statement of the Problem

Airtel Kenya is one of the telecommunication companies that have been operating in the country for decades, however its market share is low at 27.2% and has stagnated at 17.1 million subscribers as at the end of 2022. Airtel has previously operated as Kencell, Celtel and Zain but its strategic decision making has been at fault and accounts for its low market penetration, performance and market share. The statistical report on mobile subscriptions in Kenya for 2018-2020 indicates a slow growth rate for Airtel from 19.7% in first quarter of 2018 to 27.2% in the last quarter of 2020. The growth rate is below the projected pace of reaching 45% of the Kenyan market share within the same time. The gap is explained by the decisions made by the managers including per second billing of call rates, low commissions given to agents, outsourcing its customer service to a third party and inability to build trust after buying and selling of the company to several companies (Mwangi, 2021). From 2020 the company has stagnated in growing its market share, which is attributed to poor decision-making in the company. Thus, the focus on adoption and use of artificial intelligence to improve decision made and the resolution of these challenges at Airtel Kenya.

Study Objective

- To assess the effect of organizational leadership on AI adoption and strategic decision-making in the digital era at Airtel in Nairobi City County, Kenya

Research question:

- How does organizational leadership affect strategic decision-making in the digital era at Airtel in Nairobi City County, Kenya?

LITERATURE REVIEW

Theoretical Review

Artificial Theory of Mind

The theory stems from the work done by Alan Turing in the mid-20th century period. It is the third level of artificial intelligence (AI) and its main focus is understanding the needs of other intelligent entities. This is based on the concept that machines have the capability to learn, understand and remember the needs, the emotions and desires of other entities and therefore adjust their behavior accordingly. Williams, Fiore and Jentsch (2022) share that the theory of the mind, operates as social interactions, where one agent can deduce the intentions and knowledge of other agents and equally adjust their behavior to fit in. This then follows, that the theory is based on having capabilities to ascribe mental states by inferring on what is happening in the mind of other people in a specific network or system. This signifies the ability for constructive interactions between agents based on understanding how each agent operates and their mental processes that guide their decision making and behavior.

When it comes to AI, the theory of the mind indicates how AI can comprehend and model the intentions, emotions and thoughts of agents, humans and other artificial intelligences and systems (Hansen & Bolander, 2020). In organization set-up, the artificial intelligence capacity to infer the motives of other AI tools, systems and humans is informed by effective communication for information sharing, the structure, culture and leadership format. Therefore, using artificial intelligence in organizations can perceive the beliefs and later model projections on what processes can be implemented to attain the expected outcomes (Williams, *et al.,* 2022). When it comes to making better strategic decisions at Airtel for improved performance outcomes and quality services delivered to the customers, the utilization of AI comes in handy. AI helps the managers and leaders to develop an effective work environment and working conditions by accurately making inferences on perspectives, the intentions, thoughts, emotions and beliefs. As such, the theory helps in explaining using of artificial intelligence in organizational settings by inferring the structures, the culture, leadership formats and its people in the decision-making process for higher productivity.

Contingency Theory

This theory is linked to the works by Fred Fiedler (1964). It states that effective leadership is based on the situation either or both internal and external situation surrounding the organization. In order to successfully manage a firm and achieve positive outcomes, it is important to take into account both the internal and external factors that influence the organization's operations, including making strategic choices and optimizing procedures. According to Otley (2016) in the field of leadership effectiveness led to better understanding of leadership styles and situational variables in organizations for better outcomes. The leadership format was effective when considering the context and situation in the organization, thus discarding the notion that one-size-fits-all methodology to leadership and highlighted the importance of considering the fit between a leader's style and the situational demands of a given task or situation (Donaldson, 2006).

According to this theory, there is no universal approach to effective leadership that is application to all scenarios and situations. However, the need for aligning the adopted leadership style and scenarios and other organizational factors. Shenkar and Ellis (2022) aver that the most proficient leaders are those who possess the ability to adjust their leadership approach to meet the demands of the given circumstances.

The theory highlights several critical factors that influence the choice of an appropriate leadership style. These considerations include the structure and complexity of the task, the quality of leader-member relations, and the amount of power and authority the leader possesses (Shenkar & Ellis, 2022). For example, in situations where tasks are well-defined and there is a positive relationship between the leader and team members, a more task-oriented leadership style may be beneficial. Conversely, in situations where tasks are ambiguous and there is a strained leader-member relationship, a more relationship-oriented leadership style may be more effective (Donaldson, 2001). Thus, contingency theory explains how organizational leadership at Airtel should consider the situations internal to the organization. The leaders must push for creativity and innovativeness, set structures for empowerment, adaptability and diverse pathways that inform better strategic decision-making.

Empirical Literature Review

Booyse and Scheepers (2023) identified the role of leadership in driving the successful adoption and execution of AI technologies for strategic decision-making. The research adopted a mixed-methods research methodology where questionnaires were administered and in-depth interviews were conducted. The analysis in the research revealed that organizational leadership is important in guaranteeing the effective integration of AI technologies in strategic decision-making. Leadership behaviors such as fostering a culture of innovation, promoting continuous learning, providing resources and support, and championing AI initiatives were found to positively influence the adoption and use of AI-based technologies. Additionally, the research emphasized the significance of leadership in creating a vision, setting strategic goals, and facilitating the alignment of AI initiatives with organizational objectives.

BelhadI, Kamble, Wamba and Queiroz (2022) researched the impact of leadership styles on the approval and implementation of AI technologies in strategic decision-making processes. The study aimed to identify the leadership styles that influence decision-makers' attitudes and behaviors towards AI adoption. As a survey, the study discovered that leadership styles had a substantial impact on the attitudes and actions of decision-makers on the adoption of AI. The study observed a positive correlation between transformational leadership, which includes innovative thinking, intellectual stimulation, and customized attention, and favorable views towards AI. It also showed that transformational leadership was connected with greater levels of AI adoption. On the other hand, transactional leadership, focused on rewards and punishments, was associated with lower levels of AI adoption.

Nazari, Shabbir and Setiawan (2021) researched the leadership strategies and behaviors that enable the efficient incorporation and usage of AI technologies. This study employed a case study approach, focusing on multiple organizations that had implemented AI technologies for strategic decision-making. Interviews were done with key stakeholders, document analysis, and observations of decision-making processes. The research

determined that leadership was essential in surmounting organizational obstacles to effectively applying AI technology in strategic decision-making. Leadership strategies such as creating a clear vision, fostering collaboration and communication, providing resources and support, and championing change were essential for driving the effective integration and utilization of AI. The research further highlighted the significance of leadership in promoting a culture that actively encourages innovation, experimentation, and ongoing learning.

Chatterjee, Chaudhuri and Vrontis (2022) assessed the influence of leadership support on the adoption and utilization of AI technologies in strategic decision-making. This study utilized a combination of survey research and interviews that produced qualitative and quantitative data. The analysis found that leadership support significantly influenced the adoption and utilization of AI technologies in strategic decision-making. Supportive leadership behaviors, such as providing resources, removing barriers, promoting a learning culture, and actively participating in AI initiatives, were positively associated with higher levels of AI adoption and utilization. The analysis emphasized the significance of leadership in creating an environment that fosters experimentation, risk-taking, and innovation.

Conceptual Framework

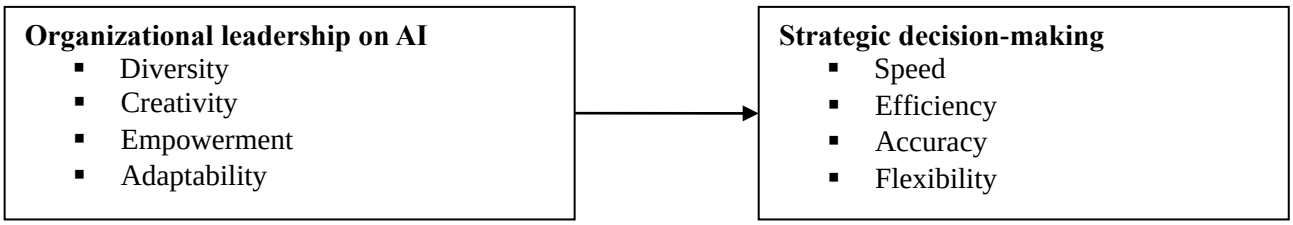

Figure 1: Conceptual Framework

METHODOLOGY

In this study, there was utilization of descriptive research design. The design focuses on 'what, where, and how' of an occurrence (Bloomfield & Fisher, 2019), therefore seeking answers on the interrelation between organizational leadership on AI and strategic decision-making in digital era. The study targeted 231 employees of Airtel working within the Nairobi City County region in Kenya. These targeted employees were drawn from different departments including HR, finance and risk, marketing and sales and business intelligence and analytics sections. Using the Yamane (1967) formula, a response group of 146 employees was reached. These respondents were given closed-ended questionnaires and they filled it as part of the data collection process.

Before the final study, a pilot test was done using 14 Airtel employees drawn from two departments and working at the regional offices in Machakos County. The pilot test confirmed the validity and reliability of the tool, as the aggregate Cronbach Alpha values are 0.988. The questionnaire was administered to respondents through a drop and pick latter method at the work station. The response rate of 100% led to the collected data to be analyzed using descriptive and inferential statistics. The quantitative data was entered into SPSS and descriptive analysis done to get means, standard deviation and frequencies. The interrelations between variables were also done and the regression model follows this format:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Y= Strategic Decision-making
$\mathbf{B_0}$ = intercept coefficient
$\mathbf{X_1}$ =Organizational leadership on AI
Ɛ = Error term

FINDINGS AND DISCUSSIONS

Descriptive Analysis Results

Table 1: Organizational Leadership on AI and Strategic Decision-Making

	N	Mean	Std. Deviation
The organization adapts quickly to embrace technological innovations including AI use	146	3.8836	.32185
The leaders display diversity causing the adoption of AI system in processing at the organization	146	3.8219	.46513
Airtel leaders use AI to synthesize trends which improves the quality of decisions made in the organization	146	4.2192	.70947
The leaders have skills in using artificial intelligence in making sound decisions	146	2.7945	1.11366
The leadership at Airtel has been empowered to use artificial intelligence in making decisions	146	3.1781	1.34259
The leaders have effectively navigated turbulence in the environment through use of AI tools	146	4.1301	.56646
The leadership at Airtel actively fosters creativity among employees for better performance e	146	4.0274	.59822
Employees are encouraged to experiment with new AI initiatives when executing work tasks	146	4.2603	.69535
Valid N (listwise)	146		

The mean scores were high such as 4.2603, 4.2192, 4.1301 and 4.0274, implying that the study respondents agreed with various statements on organizational leadership on the concept of AI adoption and use. The respondents strongly agreed on employees experimenting with new AI tools, navigating turbulence using AI tools, fostering creativity and the leaders synthesize trends. These indicate that leaders are at the core of AI adoption and use and hence impact on strategic decision-making at organizational level.

Table 2: Artificial Intelligence Influence on Strategic Decision-Making

	N	Mean	Std. Deviation
The AI usage has increased the speed at which strategic decisions are made within the organization	146	4.1301	.63532
Rapid decision-making is priority for Airtel in quest for strategic success	146	4.0890	.69403
AI usage has improved accuracy of decisions made that streamline the workflow at Airtel	146	4.0274	.86260
There is flexibility of the decision-making process at Airtel Kenya	146	4.1644	.52559
The strategic decisions are based on reliable data augmented by AI use	146	3.9521	.51638
Input and ideas from employees at various levels enhance the flexibility of the strategic decision-making processes.	146	3.6507	.85171
85Valid N (listwise)	146		

Source: Researcher (2024)

Responses shared in Table 2 highlight that the respondents strongly agreed on these components under strategic decision -making of flexible, speedy, and improved accuracy of the decisions; were witnessed at Airtel -Kenya.

Pearson Moment Correlation Analysis Results

Table 3: Pearson Moment Correlation Analysis Results

	Organizational Leadership on AI	Strategic Decision Making
Organizational Leadership on AI	1	
Strategic Decision Making	.992	1

Source: Researcher (2024)

The correlation coefficient of 0.992 between organizational leadership on AI and strategic decision-making reflects the highest positive relationship, indicating that effective leadership is crucial for making strategic decisions related to AI. This result is consistent with Deloitte (2021), which emphasizes that effective leadership is essential for successful AI adoption and its influence on decision-making. Conversely, Northouse (2018) questions the direct correlation between leadership and strategic decision-making in AI contexts, proposing that leadership might impact other factors more significantly.

Multiple Regression Analysis Results

This was done through the model summary, the ANOVA tests and beta coefficient to show the relationship between the two variables.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.993a	.986	.985	.76170

Source: Researcher (2024)

The model's impressive ability to explain nearly 99% of the variance in strategic decision-making indicates that the predictor – organizational leadership- is highly relevant and influential. These results show that if Airtel Kenya wishes to enhance its strategic decision-making, it should prioritize improvements and strengthen the leadership capabilities related to AI. Thus, Airtel Kenya and other organizations can better harness the potential of AI technologies and enhance their strategic decision-making processes.

Table 5: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5616.632	1	5616.632	9,888.437	.000b
	Residual	81.806	144	.568		
	Total	5698.438	145			

a Dependent Variable: Strategic Decision Making

b Predictors: (Constant), Organizational Leadership on AI

The results in Table 5, show the model was found to be statistically significant [$p<0.05$], and organizational leadership on AI was an effective and significant predictor of better strategic decision-making at Airtel [$F = df(1, 144) = 9,888.437$

Table 6: Beta Coefficient Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.671	.287		5.829	.000
	Organizational Leadership on AI	.600	.069	.854	8.662	.000

The resultant equation is:

The regression equation was:

$Y=1.671+ 0.600X_3$

Where:

$Y =$ Strategic decision-making

$X_1 =$ Organizational leadership

The regression equation above indicates that at constant level without influence of any factor, the strategic decision-making at Airtel Kenya is 1.671. The results also show that for a unit rise in organizational leadership on AI, the strategic decision-making score increases by 0.600 units. The same views were held by Booyse and Scheepers (2023) emphasizing the critical role of effective organizational leadership in the successful integration of AI technologies, which enhances decision-making efficiency. Similarly, Belhadi et al. (2022) demonstrate that transformational leadership styles positively influence attitudes toward AI adoption, thereby improving decision-making capabilities, which concur with the observed impact of leadership in your findings. But with contrary findings, Northouse (2018) questions the direct correlation between leadership and strategic decision-making in AI contexts, suggesting that leadership may influence other factors more significantly. This perspective raises a potential contradiction to the finding that organizational leadership has the most substantial positive impact on strategic decision-making, as observed in your results.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that organizational leadership on AI adoption, implementation and utilization played a crucial role in enhancing strategic decision-making at Airtel Kenya. The leadership's proactive approach to AI, combined with an open and transparent organizational culture, significantly contributes to the effective use of AI in decision-making processes. However, challenges such as impediments to AI adoption and communication issues need to be addressed to fully leverage AI's potential.

The study makes these recommendations that the leaders should continue to foster a culture of innovation, promote continuous learning, and provide the necessary resources and support for AI initiatives. This includes offering training programs to improve AI-related competencies among staff.

The study suggest that the management team should identify and mitigate the specific impediments to AI adoption at individual, departmental and organizational level. In terms of policy guidelines, the study recommends the development of practical guidelines that addresses any ethical concerns related to AI including bias, and data privacy.

REFERENCES

Arakpogun, E. O., Elsahn, Z., Olan, F., & Elsahn, F. (2021). Artificial intelligence in Africa: Challenges and opportunities. *The fourth industrial revolution: Implementation of artificial intelligence for growing business success, 375-388.*

Belhadi, A., Kamble, S., Wamba, S., & Queiroz, M. M. (2022). Building supply-chain resilience: an artificial intelligence-based technique and decision-making framework. *International Journal of Production Research, 60(14),* 4487-4507.

Benbya, H., Nan, N., Tanriverdi, H., & Yoo, Y. (2020). Complexity and information systems research in the emerging digital world. Mis Quarterly, 44(1), 1-17.

Biallas, M., & O'Neill, F. (2020). *Artificial Intelligence Innovation in Financial Services* (No. 34305). The World Bank Group.

Bloomfield, J., & Fisher, M. J. (2019). Quantitative research design. *Journal of the Australasian Rehabilitation Nurses Association*, *22*(2), 27-30.

Bokhari, S. A. A., & Myeong, S. (2022). Use of artificial intelligence in smart cities for smart decision-making: A social innovation perspective. *Sustainability*, *14*(2), 620.

Booyse, D., & Scheepers, C. B. (2023). Barriers to adopting automated organisational decision-making through the use of artificial intelligence. Management Research Review.

Borges, A. F., Laurindo, F. J., Spínola, M. M., Gonçalves, R. F., & Mattos, C. A. (2021). The strategic use of artificial intelligence in the digital era: Systematic literature review and future research directions. *International Journal of Information Management*, *57*, 102225.

Chatterjee, S., Chaudhuri, R., & Vrontis, D. (2022). AI and digitalization in relationship management: Impact of adopting AI-embedded CRM system. *Journal of Business Research*, *150*, 437-450.

Chui, M., Yee, L., Hall, B., & Singla, A. (2023). The state of AI in 2023: Generative AI's breakout year.

Donaldson, L. (2001). *The contingency theory of organizations*. Sage.

Donaldson, L. (2006). The contingency theory of organizational design: challenges and opportunities. *Organization Design: The evolving state-of-the-art*, 19-40.

Hansen, L. D., & Bolander, T. (2020). Implementing theory of mind on a robot using dynamic epistemic logic. In *Twenty-Ninth International Joint Conference on Artificial Intelligence* (1615-1621). International Joint Conference on Artificial Intelligence Organization.

Harney, B. (2023). Contingency theory. In Encyclopedia of Human Resource Management (pp. 60-61). Edward Elgar Publishing.

Karuga, C., Wairimu, K., & Yatich, H. (2023). Influence of Structural Decisions Strategy on Organizational Performance of Cement Manufacturing Firms in Kenya. *International Journal of Strategic Management*, *2*(1), 22-37.

Kudyba, S., Fjermestad, J., & Davenport, T. (2020). A research model for identifying factors that drive effective decision-making and the future of work. *Journal of Intellectual Capital*, *21*(6), 835-851.

Mwangi, J. W. (2021). *Causes of attrition on organization performance in the telecommunication industry in Kenya a case of Airtel Kenya Limited* (Doctoral dissertation, Daystar University, School of Business and Economics).

Nauhaus, S., Luger, J., & Raisch, S. (2021). Strategic decision making in the digital age: Expert sentiment and corporate capital allocation. *Journal of Management Studies*, *58*(7), 1933-1961.

Nazari, N., Shabbir, M. S., & Setiawan, R. (2021). Application of Artificial Intelligence powered digital writing assistant in higher education: randomized controlled trial. Heliyon, 7(5).

Oredo, J., & Dennehy, D. (2022). Exploring the Role of Organizational Mindfulness on Cloud Computing and Firm Performance: The Case of Kenyan Organizations. *Information Systems Frontiers*, 1-22.

Otley, D. (2016). The contingency theory of management accounting and control: 1980–2014. *Management accounting research*, *31*, 45-62.

Owuor, E. (2018). Impact of disruptive technology on the performance of insurance firms in Kenya. *Journal of strategic management*, *3*(1), 72-82.

Shani, F., Awino, Z. B., Ogutu, M., & Iraki, X. N. (2022). Decision Quality and Performance Of Project Based Non-Governmental Organizations In Kenya. *DBA Africa Management Review*, *12*(1), 120-133.

Shenkar, O., & Ellis, S. (2022). The rise and fall of structural contingency theory: A theory's 'autopsy'. *Journal of Management Studies*, *59*(3), 782-818.

Tong-On, P., Siripipatthanakul, S., & Phayaphrom, B. (2021). The implementation of business intelligence using data analytics and its effects towards on performance in the hotel industry in Thailand. *International Journal of Behavioral Analytics, 1(2).*

Williams, J., Fiore, S. M., & Jentsch, F. (2022). Supporting artificial social intelligence with theory of mind. *Frontiers in artificial intelligence*, *5*, 750763.