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Management Information Systems Capabilities and Performance of Kenya Electricity Generating Company

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Abstract: **Kenya Electricity Generating Company (KenGen) has adopted management information systems (MIS) to support strategic planning, streamline operations and improve efficiency, yet it continues to face rising operational costs, low plant utilisation and pressure on revenues. This study examined the effect of MIS capabilities on the performance of KenGen, focusing on three modules: the accounting information system (AIS), the human resource management system (HRMS) and the decision support system (DSS). The study was anchored on the Resource-Based View, the Technology Acceptance Model and Organisational Decision Theory. An explanatory research design was adopted. A census of 50 employees (10 managers and 40 staff) at KenGen headquarters in Nairobi was undertaken, of whom 46 returned usable questionnaires (92% response rate). Data were analysed using descriptive statistics, Pearson correlation and multiple linear regression. The three MIS modules jointly explained 73.6% of the variation in organisational performance ($R^2 = 0.736$). The accounting information system had the strongest effect ($\beta = 0.504$, $p < 0.05$), followed by the human resource management system ($\beta = 0.323$, $p < 0.05$) and the decision support system ($\beta = 0.268$, $p < 0.05$). The study concludes that MIS capabilities have a positive and significant effect on the performance of KenGen, with financial information systems the most influential. It recommends that KenGen strengthen and further automate its AIS, expand training on its HRMS, and invest in advanced analytics within its DSS, and that the Ministry of Energy and Petroleum promote integrated, interoperable information systems across public energy institutions.**

Keywords: **Management Information Systems, Accounting Information System, Human Resource Management System, Decision Support System, Organisational Performance, KenGen, Energy Sector, Kenya.**

1. INTRODUCTION

Organisations increasingly depend on management information systems (MIS) to gather, process and interpret data in support of decision-making and performance (Ringim, Razalli & Hasnan, 2019; Mutuku, 2019; Mahmood, Ahmed & Fadhil, 2021). MIS capability refers to the combination of information tools, processes and people that enables an organisation to collect, process and share the information it needs to meet its goals (Mithas, Ramasubbu & Sambamurthy, 2022). In the energy sector, where firms face competition, regulatory pressure and the shift to renewable sources, MIS supports real-time monitoring of generation, consumption and equipment, predictive maintenance and demand forecasting (Pick, 2022; Wieczorek-Kosmala, Marquardt & Kurpanik, 2021).

African utilities have followed the same path. South Africa's Eskom uses real-time analytics to anticipate outages, predict demand and plan maintenance (Ayamolowo, Manditereza & Kusakana, 2022), while distribution companies in Nigeria have used smart metering to detect anomalies and reduce losses (Oseni, 2021). Across the region, utilities have turned to MIS as a strategic tool for decision-making and performance (Tete et al., 2023).

The Kenya Electricity Generating Company (KenGen), established in 1954 and listed on the Nairobi Securities Exchange with the Government of Kenya as majority shareholder, is the country's leading electricity generator, producing power

from hydro, geothermal, thermal and wind sources for sale to Kenya Power. Despite its investment in information systems, KenGen has faced reduced generation, higher operational costs from ageing machinery, declining margins and low plant utilisation (KenGen, 2023). Earlier studies have linked MIS to market share in supermarkets (Kariuki & Nzuki, 2019), to the performance of manufacturing firms (Okeke, 2021) and to institutional performance in universities (Shniekat et al., 2022), but little empirical evidence exists on how specific MIS capabilities affect the performance of a state-owned power generator.

This study therefore examined the effect of MIS capabilities on the performance of KenGen. Three specific objectives guided the inquiry: (i) to assess the effect of the accounting information system module on performance; (ii) to determine the effect of the human resource management system module on performance; and (iii) to evaluate the effect of the decision support system module on performance.

2. LITERATURE REVIEW

2.1 Theoretical Framework

The study was anchored on three theories that together explain how information system capabilities translate into organisational performance.

The Resource-Based View (Penrose, 1959; Barney, 1991) holds that an organisation's performance and competitive advantage depend on how well it deploys valuable internal resources and capabilities. Information systems, the data they hold and the skills of their users are such resources. The theory explains how KenGen can use its MIS to improve planning, operations and service delivery. Its limitation, that it gives little attention to how resources are renewed in changing environments, is addressed by the dynamic capabilities extension (Teece, Pisano & Shuen, 1997).

The Technology Acceptance Model (Davis, 1989) proposes that the adoption of a technology depends on its perceived usefulness and perceived ease of use. A system delivers value only if staff accept and use it. The model therefore frames the study's attention to training, user support and usability in the AIS, HRMS and DSS. It has been criticised for overlooking social and organisational influences, which later models such as the Unified Theory of Acceptance and Use of Technology sought to address (Venkatesh et al., 2003).

Organisational Decision Theory (Simon, 1947) emphasises that managers make decisions under bounded rationality, with limited information and time. Information systems that provide timely, accurate and well-organised data widen these bounds and improve decision quality. The theory underpins the examination of the decision support system and of how integrated information supports evidence-based management.

2.2 Accounting Information Systems and Organisational Performance

Accounting information systems automate the capture, processing and reporting of financial data, reducing errors and freeing accountants for higher-value work (Al-Matari et al., 2022; Ali, Omar & Bakar, 2020). Ahmad and Al-Shbiel (2019) found that AIS improved the performance of Jordanian industrial SMEs through better knowledge management, while Olaofe-Obasesin (2020) reported a positive effect of AIS on the performance of Nigerian firms. Johari, Yuhana and Norbadirim (2021) showed that information quality, system quality and usability of AIS affected the effectiveness of manufacturing SMEs. Earlier, Grande, Estébanez and Colomina (2011) found that Spanish SMEs with more sophisticated AIS performed better, and Soudani (2012) linked AIS effectiveness to internal control, reporting and efficiency in the United Arab Emirates. These studies focused on SMEs and private firms outside Kenya.

2.3 Human Resource Management Systems and Organisational Performance

HRM capability enables an organisation to recruit, develop and retain the right people and to manage change (Çaliskan, 2021). Jashari and Kutllovci (2020) found a strong positive relationship between HRM practices and the performance of Kosovan manufacturers, with recruitment and selection most strongly correlated with performance. Huselid (1995) and Delaney and Huselid (1996) showed that selective hiring, training and performance-based pay were associated with lower turnover, higher productivity and better financial performance in United States firms. In Kenya, Kiangoi (2021) found that competence training improved employee performance at Tata Chemicals Magadi, while Mattalatta and Andriani (2023) found that HRM influenced performance indirectly through talent management. None of these studies examined HRM information systems in a public utility.

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2.4 Decision Support Systems and Organisational Performance

Decision support systems help managers analyse large volumes of data to make complex decisions (Burstein, Holsapple & Li, 2018). Aleid and Yavuz (2022) found that decision support and business intelligence applications improved strategic decision-making in organisations in Gaziantep, and Alnajjar and Al-Zoubi (2022) found that DSS strengthened organisational empowerment in Jordanian universities. Neiroukh, Emeagwali and Aljuhmani (2021) showed that DSS capability improved the speed and quality of decisions and, through them, organisational performance, while Shim et al. (2002) concluded that DSS improves the quality, speed and consistency of managerial decisions. The evidence comes largely from universities and private firms outside Africa.

3. RESEARCH METHODOLOGY

The study adopted an explanatory research design to establish how MIS capabilities explain variation in organisational performance. The target population comprised 50 employees at KenGen headquarters in Nairobi who use or oversee the organisation's information systems: 10 managers and 40 other staff. Because the population was small, a census was used (Mugenda & Mugenda, 2003).

Data were collected using a structured questionnaire with sections on demographic characteristics, the accounting information system, the human resource management system, the decision support system and organisational performance. Items were measured on a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The instrument was pre-tested on five employees, and content validity was established through review by the research supervisor. Cronbach's alpha for all constructs exceeded 0.70 (overall $\alpha = 0.828$; Table 1).

Data were analysed using SPSS through descriptive statistics (means and standard deviations) and inferential statistics (Pearson correlation and multiple linear regression). The regression model was:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

where Y is organisational performance, X_1 the accounting information system, X_2 the human resource management system, X_3 the decision support system, β_0 the constant, β_1–β_3 the regression coefficients and ε the error term. Kolmogorov-Smirnov tests indicated that all variables were normally distributed ($p > 0.05$), variance inflation factors of 2.27 to 2.57 ruled out multicollinearity, and the Durbin-Watson statistic of 1.912 indicated no autocorrelation (Table 1). The study obtained approval from the university and a research licence from NACOSTI; participation was voluntary, informed consent was obtained and responses were kept confidential.

Table 1: Reliability and Diagnostic Tests

Variable	Cronbach's α	K-S statistic	K-S Sig.	Tolerance	VIF
Accounting information system	0.841	0.092	0.200	0.412	2.427
Human resource management system	0.826	0.087	0.200	0.389	2.570
Decision support system	0.853	0.081	0.200	0.441	2.268
Organisational performance	0.791	0.095	0.200	–	–

Source: Research Data (2026)

4. FINDINGS AND DISCUSSION

Of the 50 questionnaires distributed, 46 were returned (9 of 10 managers and 37 of 40 staff), a response rate of 92%. Table 2 summarises the respondents' profile. Most were male (60.9%), most had over six years' experience in the energy sector (78.3%), and most held at least a bachelor's degree (73.9%), suggesting that they were well placed to assess the organisation's information systems.

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Table 2: Profile of Respondents (n = 46)

Characteristic	Category	Frequency	Percent (%)
Gender	Male	28	60.9
	Female	18	39.1
Experience in energy sector	Less than 6 years	10	21.7
	6–12 years	16	34.8
	13–20 years	12	26.1
	Over 20 years	8	17.4
Highest qualification	Diploma	9	19.6
	Bachelor's degree	24	52.2
	Master's degree	10	21.7
	Other	3	6.5

Source: Research Data (2026)

4.1 Accounting Information System and Organisational Performance

Respondents rated six statements on the accounting information system. Results are presented in Table 3.

Table 3: Mean Ratings for the Accounting Information System

Statement	Mean	SD
The AIS provides accurate and timely financial data to management for quick, informed decisions	3.821	0.711
The AIS improves financial decision-making by accurately recording and reporting all transactions	3.754	0.742
The AIS enhances budgeting and forecasting through real-time financial data	3.688	0.796
The AIS supports accurate financial reports that help assess financial health	3.845	0.684
The AIS allows consistent monitoring and analysis of financial data	3.779	0.721
The AIS aligns financial performance with organisational objectives and KPIs	3.866	0.673
Aggregate score	3.792	0.721

Source: Research Data (2026)

Respondents agreed that the AIS aligns financial performance with organisational objectives (mean = 3.87), supports accurate financial reports (mean = 3.85) and provides accurate and timely data to management (mean = 3.82). Budgeting and forecasting support received the lowest, though still positive, rating (mean = 3.69). The aggregate mean of 3.79 indicates a positive view of the AIS. The accounting information system had the strongest correlation with performance ($r = 0.974$, $p < 0.01$) and the largest standardised effect in the regression model ($\beta = 0.504$, $p < 0.05$; Table 7). These findings agree with Grande et al. (2011) and Soudani (2012), who linked AIS to better financial performance, reporting and control, and with Olaofe-Obasesin (2020) and Ahmad and Al-Shbiel (2019). Consistent with the Resource-Based View, accurate financial information is a strategic internal resource that improves managerial control.

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4.2 Human Resource Management System and Organisational Performance

Results on the human resource management system are presented in Table 4.

Table 4: Mean Ratings for the Human Resource Management System

Statement	Mean	SD
The HRMS helps hire the right individuals and match them to suitable roles	3.744	0.752
HRMS-supported recruitment reduces hiring costs through suitable selection from the outset	3.688	0.804
The HRMS supports training and development that makes the workforce more agile	3.821	0.694
HRMS-driven training demonstrates commitment to staff, improving performance and reducing turnover	3.756	0.728
The HRMS integrates performance management with strategic goals	3.889	0.661
The HRMS enables clear performance expectations aligned with strategic goals	3.798	0.709
Aggregate score	3.783	0.725

Source: Research Data (2026)

Respondents agreed that the HRMS integrates performance management with strategic goals (mean = 3.89), supports training that makes the workforce more agile (mean = 3.82) and sets clear performance expectations (mean = 3.80). The lowest rating concerned reduced hiring costs (mean = 3.69). The aggregate mean was 3.78. The HRMS was strongly correlated with performance ($r = 0.795$, $p < 0.01$) and had a positive and significant effect in the regression model ($\beta = 0.323$, $p < 0.05$). The findings are consistent with Jashari and Kutllovci (2020), Huselid (1995) and Delaney and Huselid (1996), who found that recruitment, training and performance management practices improve productivity and performance, and with Kiangoi (2021) on the value of competence training.

4.3 Decision Support System and Organisational Performance

Table 5 presents respondents' ratings of the decision support system.

Table 5: Mean Ratings for the Decision Support System

Statement	Mean	SD
The DSS provides a well-managed data environment for extracting meaningful insights	3.854	0.671
The DSS automates data processing, improving decision-making speed and efficiency	3.799	0.703
The DSS facilitates collaborative decision-making across departments and levels	3.722	0.781
The DSS promotes organisational alignment around shared strategic goals	3.811	0.687
The DSS integrates knowledge management tools that enhance collaboration and sharing	3.688	0.826
The DSS analyses historical data to anticipate and address potential challenges	3.877	0.649
Aggregate score	3.792	0.720

Source: Research Data (2026)

Respondents agreed that the DSS helps analyse historical data to anticipate challenges (mean = 3.88), provides a well-managed data environment for insight (mean = 3.85) and promotes alignment around strategic goals (mean = 3.81). Integration of knowledge management tools received the lowest rating (mean = 3.69). The aggregate mean was 3.79. The DSS was strongly correlated with performance ($r = 0.930$, $p < 0.01$) and had a positive and significant effect in the regression model ($\beta = 0.268$, $p < 0.05$). This agrees with Aleid and Yavuz (2022), Neiroukh et al. (2021) and Shim et al. (2002), who found that DSS improves the speed, quality and consistency of decisions. In line with Organisational Decision Theory, the DSS extends the information available to managers working under bounded rationality.

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4.4 Organisational Performance

Respondents' ratings of organisational performance are presented in Table 6.

Table 6: Mean Ratings for Organisational Performance

Statement	Mean	SD
Operations have become more efficient due to improved information flow and faster decisions	3.744	0.624
Capacity to attain strategic objectives has improved through integration of AIS, HRMS and DSS	3.688	0.672
KenGen has introduced innovative practices directly supported by its MIS capabilities	3.756	0.731
Aggregate score	3.729	0.676

Source: Research Data (2026)

Respondents agreed that KenGen had introduced innovative practices supported by its MIS (mean = 3.76), that operations had become more efficient through better information flow (mean = 3.74) and that integration of the three systems had improved attainment of strategic objectives (mean = 3.69). The aggregate mean of 3.73 indicates a positive perception of the contribution of MIS to performance.

4.5 Correlation and Regression Analysis

Table 7 presents the correlations among the study variables, and Tables 8 and 9 present the regression results.

Table 7: Correlation Matrix

Variable	AIS	HRMS	DSS	Performance
Accounting information system (AIS)	1			
Human resource management system (HRMS)	0.453	1		
Decision support system (DSS)	0.170	0.438	1	
Organisational performance	0.974**	0.795**	0.930**	1

*** Correlation significant at the 0.01 level (2-tailed).*

Source: Research Data (2026)

Table 8: Model Summary and ANOVA

Statistic	Value
R	0.858
R^2	0.736
Adjusted R^2	0.701
Std. error of the estimate	0.016
F (3, 42)	3761.296
Sig.	0.000
Durbin-Watson	1.912

Source: Research Data (2026)

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Table 9: Regression Coefficients

Predictor	B	Std. Error	Beta	t	Sig.
(Constant)	0.072	0.051	–	1.409	0.166
Accounting information system (X_1)	0.440	0.044	0.504	9.921	0.000
Human resource management system (X_2)	0.375	0.017	0.323	22.216	0.000
Decision support system (X_3)	0.161	0.027	0.268	5.865	0.000

Source: Research Data (2026)

The three MIS modules jointly explained 73.6% of the variation in organisational performance ($R^2 = 0.736$), and the model was statistically significant ($p < 0.05$). The fitted model was:

$$Y = 0.072 + 0.440X_1 + 0.375X_2 + 0.161X_3$$

All three modules had positive and significant coefficients. On the standardised coefficients, the accounting information system had the largest effect ($\beta = 0.504$), followed by the human resource management system ($\beta = 0.323$) and the decision support system ($\beta = 0.268$). The constant was not significant ($p = 0.166$). The remaining 26.4% of the variation in performance is attributable to factors outside the model.

5. CONCLUSION

This study established that MIS capabilities have a positive and statistically significant effect on the performance of Kenya Electricity Generating Company. Together, the accounting information system, the human resource management system and the decision support system explained nearly three-quarters of the variation in organisational performance.

The accounting information system was the strongest predictor, improving the accuracy of financial information, reporting and alignment with organisational objectives, although its support for budgeting and forecasting was rated lowest. The human resource management system improved performance by linking performance management to strategic goals and supporting staff training, though its effect on hiring costs was less evident. The decision support system improved performance by providing a managed data environment and supporting analysis of past data, but its integration of knowledge-sharing tools was weaker. Overall, MIS capabilities, and financial information systems in particular, are an important internal resource for performance at KenGen.

6. RECOMMENDATIONS

6.1 Policy Recommendations

The Ministry of Energy and Petroleum and the National Treasury should promote unified digital financial systems across state corporations in the energy sector, with compliance mechanisms that support transparency, accountability and real-time financial reporting.

The Ministry of Energy and Petroleum and the ICT Authority should encourage interoperable decision support systems across energy-sector institutions to improve coordination, forecasting and national energy planning, while the Public Service Commission should promote integrated HRMS platforms for consistent recruitment, performance monitoring and talent management in public institutions.

6.2 Practice Recommendations

KenGen management should further integrate and automate its accounting information system, giving priority to the budgeting and forecasting functions that respondents rated lowest, and build the capacity of accounting staff to use the system fully.

KenGen's human resource directorate should expand training on the HRMS and make greater use of HR data for workforce planning, while senior management and the ICT department should invest in advanced analytics, artificial intelligence tools and knowledge management features within the DSS, supported by user training.

6.3 Suggestions for Further Research

This study was confined to KenGen headquarters. Future studies should extend the analysis to other state corporations and private firms in Kenya's energy sector, examine other systems such as enterprise resource planning, customer relationship management and supply chain management, use longitudinal designs to capture the effects of system maturity, and test moderating and mediating factors such as organisational culture, user competence and leadership support.

REFERENCES

[1] Ahmad, M. A., & Al-Shbiel, S. O. (2019). The effect of accounting information system on organizational performance in Jordanian industrial SMEs: The mediating role of knowledge management. International Journal of Business and Social Science, 10(3), 99–104.

[2] Al-Matari, A. S., Amiruddin, R., Aziz, K. A., & Al-Sharafi, M. A. (2022). The impact of dynamic accounting information system on organizational resilience: The mediating role of business processes capabilities. Sustainability, 14(9), 4967.

[3] Aleid, A. A., & Yavuz, U. (2022). The effect of using decision support systems applications and business intelligence systems in making strategic decisions: A field study in the city of Gaziantep. Global Journal of Economics & Business, 12(2).

[4] Ali, B. J., Omar, W. A. W., & Bakar, R. (2020). Accounting information system (AIS) and organizational performance: Moderating effect of organizational culture. International Journal of Economics, Commerce and Management, 4(4), 138–158.

[5] Alnajjar, F. J., & Al-Zoubi, M. R. (2022). Decision support systems and its impact on organization empowerment: Field study of Jordanian universities. Decision Support Systems, 2(4), 9–14.

[6] Ayamolowo, O. J., Manditereza, P. T., & Kusakana, K. (2022). South Africa power reforms: The path to a dominant renewable energy-sourced grid. Energy Reports, 8, 1208–1215.

[7] Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99–120.

[8] Burstein, F., Holsapple, C. W., & Li, X. (2018). Organizational decision support systems: Parameters and benefits. In Handbook on decision support systems 1: Basic themes (pp. 433–468). Springer.

[9] Çaliskan, E. N. (2021). The impact of strategic human resource management on organizational performance. Journal of Naval Sciences and Engineering, 6(2), 100–116.

[10] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340.

[11] Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. Academy of Management Journal, 39(4), 949–969.

[12] Grande, E. U., Estébanez, R. P., & Colomina, C. M. (2011). The impact of accounting information systems (AIS) on performance measures: Empirical evidence in Spanish SMEs. The International Journal of Digital Accounting Research, 11, 25–43.

[13] Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. Academy of Management Journal, 38(3), 635–672.

[14] Jashari, A., & Kutllovci, E. (2020). The impact of human resource management practices on organizational performance: Case study of manufacturing enterprises in Kosovo. Business: Theory and Practice, 21(1), 222–229.

[15] Johari, N. H., Yuhana, I. S., & Norbadirim, N. A. (2021). Accounting information system and organizational effectiveness: Evidence from SMEs manufacturing companies. European Proceedings of Finance and Economics, 7(1), 8–16.

[16] Kariuki, M., & Nzuki, D. (2019). Management information systems capabilities and organizational performance of supermarkets in Nairobi City County, Kenya. International Journal of Education and Research, 7(6), 77–88.

[17] Kenya Electricity Generating Company. (2023). Annual report and financial statements. KenGen PLC.

[18] Kiangoi, N. (2021). The impact of human resource practices on organizational performance: A case study of Tata Chemicals Magadi Limited, in Kenya [Master's thesis, United States International University–Africa].

[19] Mahmood, N. H., Ahmed, N., & Fadhil, S. N. (2021). The significance of management information systems in improving organizational performance and effectiveness. Journal of Garmian University, 7(4), 195–211.

[20] Mattalatta, M., & Andriani, Y. (2023). Influence of human resource management on organizational performance with talent management mediation. Innovation Business Management and Accounting Journal, 2(3), 147–156.

[21] Mithas, S., Ramasubbu, N., & Sambamurthy, V. (2022). How information management capability influences firm performance. MIS Quarterly, 2(1), 237–256.

[22] Mugenda, O. M., & Mugenda, A. G. (2003). Research methods: Quantitative and qualitative approaches. ACTS Press.

[23] Mutuku, M. K. (2019). *Electronic Commerce Capability and Performance of Commercial Banks in Kenya* (Doctoral dissertation, Doctoral Dissertation, Kenyatta University).

[24] Neiroukh, S., Emeagwali, O. L., & Aljuhmani, H. Y. (2021). Decision support system capability and organizational performance: Unraveling the mediating mechanisms of decision-making processes. Management Decision, 2(1), 6–15.

[25] Okeke, C. O. (2021). Effect of management information systems on organizational performance in manufacturing firms. Research Journal of Management Practice, 1(1).

[26] Olaofe-Obasesin, M. (2020). Effects of accounting information system on organization performance in Nigeria. International Journal of Software Engineering and Computer Systems, 6(2), 18–22.

[27] Oseni, M. O. (2021). An analysis of the power sector performance in Nigeria. Renewable and Sustainable Energy Reviews, 15(9), 4765–4774.

[28] Penrose, E. T. (1959). The theory of the growth of the firm. Basil Blackwell.

[29] Pick, J. B. (2022). Smart cities in the United States and worldwide: A rich arena for management information system studies. Journal of Information Technology Case and Application Research, 19(3), 133–144.

[30] Ringim, K. J., Razalli, M. R., & Hasnan, N. (2019). The relationship between information technology capability and organizational performance in Nigerian banks. International Journal of Business Research and Development, 4(2), 1–10.

[31] Shim, J. P., Warkentin, M., Courtney, J. F., Power, D. J., Sharda, R., & Carlsson, C. (2002). Past, present, and future of decision support technology. Decision Support Systems, 33(2), 111–126.

[32] Shniekat, N., Al-Abdallat, W., Al-Hussein, M., & Ali, B. (2022). Influence of management information systems dimensions on institutional performance. Information Sciences Letters, 11(5), 1435–1443.

[33] Simon, H. A. (1947). Administrative behavior: A study of decision-making processes in administrative organization. Macmillan.

[34] Soudani, S. N. (2012). The usefulness of an accounting information system for effective organizational performance. International Journal of Economics and Finance, 4(5), 136–145.

[35] Tashtoush, L. (2021). The role of information systems capabilities in enhancing the organizational performance. Journal of Information Systems and Informatics, 3(2), 303–328.

[36] Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509–533.

[37] Tete, K. H., Soro, Y. M., Sidibe, S. S., & Jones, R. V. (2023). Assessing energy security within the electricity sector in the West African Economic and Monetary Union. Energy Policy, 173, 113336.

[38] Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425–478.

[39] Wieczorek-Kosmala, M., Marquardt, D., & Kurpanik, J. (2021). Drivers of sustainable performance in European energy sector. Energies, 14(21), 7055.