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EFFECT OF TECHNOLOGICAL SUPPORT SYSTEMS ON EMPLOYEE PERFORMANCE AT ABSA BANK IN NAIROBI COUNTY, KENYA

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Abstract:

Purpose: This study examined the effect of technological support systems on employee performance at ABSA Bank in Nairobi County, Kenya, in the context of rapid digital transformation and persistent technological challenges affecting efficiency and service delivery.

Methodology: A descriptive research design was adopted, targeting 187 employees sampled from a population of 350. Data were collected using semi-structured questionnaires, key informant interviews, and secondary sources. Quantitative data were analyzed using descriptive statistics and multiple regression analysis, while qualitative insights complemented the statistical findings.

Findings: The results indicated that technological support systems—including availability of digital tools, responsive IT support, reliable network connectivity, and effective cybersecurity—had a significant positive effect on employee performance. Regression results revealed a strong and statistically significant relationship ($\beta = 0.324$, $p < 0.001$), with technological support systems explaining 57.7% of the variance in employee performance. Improved systems were associated with enhanced efficiency, faster task completion, and higher quality of work.

Unique Contribution to Theory, Practice and Policy: The study extends the application of the Balanced Scorecard Theory by empirically demonstrating the role of technological support systems in driving employee performance within a digital banking context. Practically, the findings guide bank management on prioritizing system reliability, IT responsiveness. From a policy perspective, the study informs banking regulators and policymakers on the importance of strengthening digital infrastructure and technology governance.

***Keywords*:** *Technological Support Systems; Employee Performance; Digital Transformation; Kenyan Commercial Banks; Balanced Scorecard Theory.*

JEL CODES: M15, M12, G21 and O33

1.0 INTRODUCTION

Background of the Study

The banking sector in Kenya has undergone significant transformation driven by rapid technological advancement and digital innovation. Financial institutions are increasingly adopting sophisticated technological support systems to enhance operational efficiency, improve service delivery, and strengthen competitive positioning in the marketplace (Misati et al., 2022). These technological support systems encompass digital workplace tools, information management systems, communication platforms, cybersecurity infrastructure, and performance monitoring systems that collectively enable employees to execute their responsibilities more effectively and respond dynamically to evolving market demands.

Technological support systems serve as critical enablers of employee performance by providing the necessary infrastructure, tools, and resources that facilitate efficient task execution, enhance collaboration, and support informed decision-making. In contemporary banking environments, employees rely heavily on integrated banking systems, customer relationship management platforms, digital communication channels, and data analytics tools to deliver quality services and maintain competitive advantage (Ooko & Muchelule, 2024). The effectiveness of these technological systems directly influences key performance outcomes including productivity levels, service quality, customer satisfaction, and organizational effectiveness.

ABSA Bank Kenya, formerly Barclays Bank Kenya, represents one of the leading commercial banks in Kenya with extensive operations across Nairobi County and other regions. As part of the ABSA Group operating across multiple African markets, the bank has invested substantially in digital transformation initiatives aimed at modernizing operations, enhancing employee capabilities, and improving customer experience (ABSA Group, 2024). These investments include deployment of advanced core banking systems, implementation of digital workplace solutions, establishment of robust cybersecurity frameworks, and adoption of performance management technologies that collectively shape the working environment and influence employee performance outcomes.

The relationship between technological support systems and employee performance has attracted considerable research attention globally, with studies demonstrating that effective technology deployment positively impacts employee motivation, engagement, productivity, and overall performance (Jabid et al., 2023). However, the contextual factors influencing this relationship vary significantly across different organizational settings, industry sectors, and geographic regions. In the Kenyan banking sector specifically, while technological adoption has accelerated substantially, empirical evidence examining how specific technological support systems influence individual employee performance remains limited.

Employee performance in banking institutions is multidimensional, encompassing productivity measures such as task completion rates and transaction processing efficiency, quality indicators including accuracy and service excellence, behavioral dimensions such as innovation and problem-solving capabilities, and outcome measures including target achievement and customer satisfaction scores (Saifi & Saifi, 2025). Technological support systems potentially influence each of these performance dimensions through various mechanisms including reduction of manual workload, enhancement of information accessibility, facilitation of collaboration, provision of performance feedback, and enabling of data-driven decision-making (Alabi, 2025).

Despite the recognized importance of technological support systems in contemporary banking operations, several gaps exist in understanding their specific effects on employee performance within the Kenyan context (Wachira & Ondigo, 2016). Previous studies have predominantly focused on organizational-level outcomes such as overall bank performance and competitive advantage, with limited attention to individual employee performance outcomes (Ayme et al., 2025). Additionally, most existing research examines technology adoption from a general perspective without disaggregating the specific components of technological support systems and their differential impacts on various performance dimensions (Ombajo et al., 2024).

Furthermore, the banking sector in Nairobi County presents unique contextual characteristics including high competition, regulatory complexity, diverse customer expectations, and rapid technological change that may moderate the relationship between technological support systems and employee performance (Samo et al., 2025). Understanding these contextual nuances is essential for developing effective strategies for technology deployment and human resource management in the banking sector. This study therefore seeks to examine the effect of technological support systems on employee performance at ABSA Bank in Nairobi County, providing empirical evidence that addresses existing knowledge gaps and informs both theoretical understanding and practical application in digital human resource management and banking operations.

Statement of the Problem

In today's digital economy, financial institutions increasingly rely on technological support systems to streamline operations, improve service delivery, and enhance employee productivity. ABSA Bank Kenya has invested heavily in digital transformation, with 94% of customer transactions conducted through digital channels and 71% of processes automated, reflecting its commitment to technological advancement (Limo, 2023). Despite these investments, employees continue to face challenges that may hinder optimal performance. Operational inefficiencies, including system downtimes, integration issues between legacy and modern platforms, and intermittent network disruptions, affect daily workflows and reduce task efficiency (Irani et al., 2023). These challenges often delay service delivery and impact the ability of staff to respond effectively to customer needs.

Furthermore, while the bank has introduced digital skills training in areas such as cybersecurity, automation, and data management, the effectiveness of these programs varies across departments, limiting employees' ability to fully leverage available technological. Inadequate IT support responsiveness and insufficient troubleshooting capacity further exacerbate the disconnect between technology availability and employee productivity (Sharma, 2024). Despite these operational realities, there is limited empirical evidence on the relationship between technological support systems and individual employee performance at ABSA Bank in Nairobi County. Existing studies predominantly focus on organizational-level outcomes, leaving a knowledge gap regarding micro-level effects. This study therefore seeks to investigate how technological support systems influence employee performance, providing context-specific insights to enhance both operational efficiency and service delivery in the bank.

Purpose of the Study

The purpose of the study was to determine the effect of Technological Support Systems on Employee Performance at ABSA Bank in Nairobi County, Kenya.

Research Hypothesis

H01: Technological Support Systems do not significantly influence employee performance at ABSA Bank in Nairobi County, Kenya.

2.0 LITERATURE REVIEW

Theoretical Framework

Balanced Scorecard Theory

Balanced Scorecard (BSC) is a strategic management instrument as formulated in 1992 by Kaplan and Norton; it transcends the conventional financial performance metrics of the organization to gauge the performance of the organization in four interrelated dimensions, namely financial performance, customer satisfaction, internal business processes, and learning and growth (Huang, 2019). The model has been made in order to address the fact that the classical performance assessment systems focused on financial metrics while the intangible and non-financial dimensions of organizational success were usually ignored (Skrinjar et al., 2020). BSC is a comprehensive instrument to consider all the impacts of technological support systems on the performance of employees in service-oriented companies, such as ABSA Bank.

The financial perspective is a very important aspect of performance measurement in the BSC model. It investigates how technological support systems contribute to financial efficiency and profitability. Technological systems allow ABSA Bank to save costs through process automation, reduced error rates, minimized transaction times, and optimized resource allocation (Chong et al., 2021). Kaplan and Norton (2004) declare that financial measures, including return on investment (ROI), cost-reduction, and revenue per employee, are necessary to assess the success of strategic

programs like digital transformation (Teng et al., 2022). However, the authors caution that over-reliance on financial measures can mask structural operational or developmental issues and therefore they are advocating a balanced approach.

The customer perspective gauges the extent of effectiveness of firms in fulfilling customer expectations especially in service quality, timeliness and reliability. The efficiency of communication among staff, problem-solving capabilities, and management of relationships through technological platforms directly determine customer satisfaction (Chumpitaz & Paparoidamis, 2020). In the case of ABSA Bank, which is an institution that works within a competitive and customer-centric environment, there is need to maintain good customer relationships through effective service channels supported by robust technological systems. Kaplan and Norton (2001) say that this methodology ensures the efforts of employees are properly aligned with the expectations of external stakeholders hence promoting loyalty and maintenance of market dominance. Empirical studies by Ocloo et al. (2022) and Wanjiru and Muturi (2020) support the claim that increased client satisfaction is achieved through better digital interaction technologies, assuming that employees are trained to use these technologies and are knowledgeable about their operation.

The internal business processes perspective deals with effectiveness and reliability of working processes within an organization. Modern workplaces require considerable technological integration in operations, such as the introduction of digital workflows, automation, and real-time data exchange. According to Kaplan and Norton (1996), improving internal processes leads to better service delivery and faster decision-making processes, and this is therefore beneficial to financial and customer outcomes. In the case of ABSA Bank, this involves the implementation of secure access technology, digital transaction systems, and integrated communication platforms. A study by Musau and Wanyonyi (2021) showed that digitalizing internal processes by banks in the COVID-19 pandemic increased productivity and maintained service delivery. This underscores the necessity to invest in streamlined technological operations to maintain operational efficiency.

The Balanced Scorecard relies on the learning and development approach, which focuses on human and intellectual capital needed to sustain performance. This element emphasizes the training of staff members, technological competency, dissemination of information and organizational culture that is critical in creating innovation (Kaplan & Norton, 2004). In the case of technological support systems at ABSA Bank, this implies providing continuous training, technical support, clear articulation of performance objectives and the establishment of a culture that embraces technological change. Research by Shahzad et al. (2021) and Kariuki and Kiambati (2022) shows that organizations focused on employee development and welfare lead to increased engagement, motivation, and retention. As long as people have the right skills and receive sufficient support in their work tasks, they tend to improve their work performance even with new technologies. The Balanced Scorecard offers an active and composite measure of the implications of technological support systems on employee performance. The four dimensions allow companies

such as ABSA Bank to assess performance comprehensively, covering tangible accomplishments and intangible resources, such as customer contentment and staff growth.

Empirical Review

Technological Support Systems and Employee Performance

Jiang et al. (2023) carefully examined the literature related to personal use of technology at work (PUTW) and devised a theoretical framework to help understand the dual effect of this approach on job performance. To categorize and generalize findings, the scholars created a comprehensive literature review of more than 150 peer-reviewed journal articles. In their study, there are positive and negative impacts of personal technological consumption on employee performance which include, among others, messaging, social media, and entertainment applications. Work design, self-regulation and organizational culture can be the factors which can make PUTW a stress reliever, enhance creativity or distract people and reduce productivity. The research highlighted the situational aspect of technology adoption and warned about corporate policies which are universal without taking into account behavioral patterns. Although they stressed technological activities which are not work related, future research can be done on formal technological solutions which will improve structured productivity.

Seifried (2022) discussed the effectiveness of Electronic Performance Support Systems (EPSS) to support employee learning and job performance in office workplaces. This study involved experimental observation and performance monitoring tools of a group of 95 office employees in Germany. The results revealed that EPSS tools like digital guidance, step-by-step tutorials and embedded support functions significantly reduced cognitive load and improved real-time task performance. The research revealed that on-demand assistance enhances retention of learning and reduces errors in active work environments. It was concluded that these solutions would help enhance work performance and also allow continued growth of employees. The study focuses on interactive learning platforms, although others can consider more comprehensive technical infrastructure, such as helpdesks, secure access systems, and integrated collaboration tools, which ensure effective work.

Muikamba and Nzuki (2019) investigated the relationship between ICT variables and the performance of employees in government offices located in Nyandarua County in Kenya. The research involved the application of structured questionnaires and focused on a sample of 160 employees of the government in different departments. Findings indicated that ICT infrastructure, personnel training and continuous technical services were very beneficial in enhancing speed of communication, data accuracy and task performance. The recommendations that the researchers encouraged in improving efficiency within the public sector were regular updates of ICT, training of users, and internal ICT support units. Their analysis emphasized the importance of institutional investment with respect to digital technologies and human ICT capabilities. The significance of the study is that it does not only evaluate the overall rate of ICT adoption in departments, but other

studies may be focused on technologies that are specifically oriented to delivering effective work and keeping employees productive.

Mutuku and Nyaribo (2015) examined how information technology has influenced the productivity of workers in several commercial banks in Kenya. The authors used questionnaires and interviews consisting of 110 banking professionals including managers and IT officers. Their study indicated that IT systems such as automated teller machines, intranet services, and communication software were important to increase the speed and efficiency of employees. Technology reduced manual handling, reduced the number of days taken to carry out transactions as well as improved communication between branches among employees. The research determined that investment in IT infrastructure plays an important role in the effectiveness of financial institutions. The study is significant as it focuses on normal banking IT systems as compared to other studies that can explore technological support systems that address modern working environments.

Ndegerege (2024) examined how Human Resource Information Systems (HRIS) in the organization of Teachers Service Commission (TSC) in Nairobi City County has influenced employee performance. The research involved the use of questionnaires and system audit tools and included a sample size of 135 HR officials and administrative staff. The findings revealed that HRIS systems have eased the process of data management, lessened duplication of jobs and enabled fast decision making by management through precise records and performance surveillance. HR systems enhanced precision in payroll and standardization of evaluation. The research found out that human resource activities are more efficient and transparent with HRIS. The HR technology tools discussed in this paper are directed to the framework of public educational management rather than specific performance-enabling technologies in banking.

Employee Performance

Employee performance encompasses how effectively individuals complete assigned tasks, achieve organizational goals, and contribute to overall productivity and quality of work outputs. In today's digitally transformed workplaces, the use of advanced technological support systems—including artificial intelligence (AI), digital collaboration tools, and performance analytics platforms—has been shown to influence performance outcomes. Empirical evidence suggests that strategic integration of digital technologies can enhance efficiency, task accuracy, and employee productivity by automating routine tasks, facilitating real-time feedback, and providing decision support (Gupta et al., 2024). AI-driven tools embedded within Human Resource Management (HRM) systems have been found to reshape performance management practices by enabling adaptive training, personalized feedback, and improved measurement of work outputs (Gupta, Lakhera, & Sharma, 2024). Similarly, research in digital workplace technologies highlights that effective technology usage when matched with appropriate training and supportive work design positively correlates with employee engagement and performance indicators such as job

satisfaction and task completion rates. However, the impact of workplace technology on performance is not universally positive; outcomes depend on contextual factors, including employee readiness, technology design, and implementation strategies. Without adequate support structures, technological interventions can also lead to stress and decreased performance.

3.0 RESEARCH METHODOLOGY

This study employed a descriptive research design to examine the effect of technological support systems on employee performance at ABSA Bank, Nairobi County, Kenya, allowing for the collection of both quantitative and qualitative data to describe existing phenomena (Creswell, 2014). The target population comprised 350 employees across operations, IT, human resources, finance, marketing, and customer service departments who actively use technological support systems. A sample of 187 respondents was selected using stratified random sampling to ensure proportional representation across all departments (Yamane, 1967). Data were collected through semi-structured questionnaires, key informant interviews, and secondary sources such as HR records and internal reports to provide comprehensive insight. Questionnaires were distributed both physically and electronically, with follow-ups conducted to maximize response rates. Quantitative data were analyzed using SPSS version 28, employing descriptive statistics and multiple regression to determine the impact of technological support systems on employee performance, while qualitative data were analyzed thematically to identify recurring patterns.

4.0 RESEARCH FINDINGS AND DISCUSSION

Response Rate

The researcher surveyed 187 employees employed in different departments at ABSA Bank in Nairobi County by administering questionnaires. The response rate is presented in Table 4.1.

Table 1: Response Rate

Category	Target Population	Actual Response	Response Rate (%)
ABSA Bank Employees	187	174	93
Total	**187**	**174**	**93**

Source: Field Survey Data (2025)

Out of 187 distributed surveys, 174 were completed and returned, yielding a response rate of 93%. This response rate is considered adequate for the study, as Alabi (2025) notes that a response rate of 70% or higher is generally regarded as exceptional for drawing reliable inferences. Therefore, the data analysis and interpretation conducted in this study are deemed valid and representative, given the high response rate achieved.

Descriptive Analysis

Technological Support Systems and Employee Performance

The research objective was to identify the impact of technological support systems on the performance of staff working at ABSA Bank in Nairobi County, Kenya. The findings are displayed in Table 2.

Table 2: Technological Support Systems and Employee Performance

Statement	Mean	Std. Deviation
Technology tools provided were adequate	4.2	0.80
IT support was available when needed	4.0	0.85
Technology improved employee efficiency	4.3	0.76
The organization invested in reliable internet connectivity	4.1	0.79
Regular system upgrades minimized disruptions	3.9	0.83
Cybersecurity measures protected work-related data	4.05	0.77
Training on the use of digital tools enhanced performance	4.0	0.82

Source: Field Survey Data (2025)

The results showed that the use of technological support systems enhanced the performance of employees at ABSA Bank to a considerable level. The respondents gave consistent responses that technology assisted them to be more efficient (M = 4.3, SD = 0.76) and they possessed sufficient tools (M = 4.2, SD = 0.80) which enabled them to complete their work efficiently. High ratings were obtained on dependability of internet connection (M = 4.1, SD = 0.79) and timely provision of IT assistance (M = 4.0, SD = 0.85), which noted the importance of infrastructure and technical support in facilitating continuous operations. Cybersecurity practices were seen as effective (M = 4.05, SD = 0.77), which explains why employees were confident about their safety working in secure digital conditions.

The evaluation highlighted aspects of areas that required further attention. The frequency of system upgrades was rated as moderate (M = 3.9, SD = 0.83), meaning that in some cases, workflow was occasionally hindered by system downtime and disruptions. Similarly, personnel training on how to use digital tools received a positive score (M = 4.0, SD = 0.82), but it implied the need to improve the provision of staff with continuous skills in digital literacy. The results showed that ABSA Bank had established an efficient technology platform that enhanced efficiency, productivity, and data security significantly, but it needed to enhance system reliability and regularly train users to exploit the benefits of technological systems to the fullest extent.

These findings align with previous research demonstrating the critical role of technological support systems in enhancing employee performance. Ayme et al. (2025) found that Electronic

Performance Support Systems significantly reduced cognitive load and improved real-time task performance among office employees, which is consistent with the high efficiency ratings observed in this study. Similarly, Muikamba and Nzuki (2019) established that ICT infrastructure, personnel training and continuous technical services were beneficial in enhancing communication speed, data accuracy and task performance in public institutions, supporting the findings on IT support availability and training effectiveness at ABSA Bank.

The moderate ratings on system upgrades reflect concerns identified by Mutuku and Nyaribo (2015), who noted that technology reliability remains a critical factor in sustaining employee productivity in banking institutions. The emphasis on cybersecurity aligns with contemporary banking sector requirements where data protection is paramount for maintaining customer trust and regulatory compliance (Huang, 2019). The need for continuous digital literacy training echoes findings by Irani et al. (2023), who emphasized that effective technology adoption requires ongoing employee development to maximize system utilization and performance outcomes.

Employee Performance

The aim of the research was to evaluate the collective staff performance at ABSA Bank in Nairobi County. These results are represented in Table 3.

Table 3: Employee Performance

Performance Indicator	Mean	Std. Dev
Timely completion of tasks	4.1	0.79
Quality of work output	4.0	0.83
Achievement of set targets	3.9	0.87
Ability to adapt to technological demands	4.0	0.82
Level of innovation and problem-solving	3.8	0.85
Commitment to organizational goals	4.1	0.80

Source: Field Survey Data (2025)

The implications of the findings were that the performance of employees at ABSA Bank was predominantly high. The participants agreed that performance of responsibilities on time (M = 4.1, SD = 0.79) and commitment towards company goals (M = 4.1, SD = 0.80) were consistently achieved, therefore technological support systems did not hinder general productivity. The quality of work output (M = 4.0, SD = 0.83) was rated high, which signifies that employees maintained performance standards with adequate technological support. The employees also noted their ability

to adjust to technological demands (M = 4.0, SD = 0.82) which reflects their ability to adapt to evolving technological conditions.

However, there were also identified opportunities for further improvement. Moderate ratings were associated with the achievement of set goals (M = 3.9, SD = 0.87), revealing that not all goals were always met and that technological support could be further optimized to enhance target achievement. Innovation and problem-solving (M = 3.8, SD = 0.85) had the lowest mean score, which means that employees felt more challenged by being engaged in creative or complex problem-solving tasks. The findings showed that technological support systems supported high levels of task performance, commitment towards goals and job quality, although increased emphasis on encouraging creativity and improving system capabilities has the potential to increase employee performance further.

Regression Analysis

Model Summary

The results in Table 4 summarize the regression model examining the relationship between technological support systems and employee performance.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.651	0.577	0.502	0.504

a. Predictors: (Constant), Technological Support Systems
Source: Field Survey Data (2025)

The correlation coefficient (R = 0.651) indicates a strong positive relationship, suggesting that higher levels of technological support are associated with better employee performance. The coefficient of determination (R^2 = 0.577) implies that approximately 57.7% of the variance in employee performance is explained by technological support systems. The adjusted R^2 (0.502) accounts for the number of predictors in the model, confirming that the model provides a satisfactory fit to the data. The standard error of the estimate (0.504) indicates that the observed employee performance scores deviate moderately from the predicted values.

ANOVA

The ANOVA results in Table 5 assess the overall significance of the regression model.

Table 5: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	14.769	1	14.769	58.213	0.000
Residual	38.564	172	0.224		

Total	53.333	173			

a. Dependent Variable: Employee Performance
b. Predictors: (Constant), Technological Support Systems
Source: Field Survey Data (2025)

The F-statistic ($F = 58.213$, $p < 0.001$) indicates that the model is statistically significant, confirming that technological support systems have a meaningful effect on employee performance at ABSA Bank. This shows that the variation in employee performance is not due to random chance but is significantly explained by technological support systems.

Regression Coefficients

Technological support systems play a pivotal role in enhancing employee performance, efficiency, and productivity in modern banking institutions. Table 6 presents the regression coefficients for the model.

Table 6: Regression Coefficients

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	2.149	.353		6.081	.000
Technological Support Systems	.324	.082	.391	3.939	.000

a. Dependent Variable: Employee Performance
Source: Field Survey Data (2025)

The regression analysis (Table 6) indicates that technological support systems significantly predict employee performance ($B = 0.324$, $t = 3.939$, $p < 0.001$). This positive relationship suggests that improvements in IT infrastructure, digital support, cybersecurity, and staff training directly enhance employee effectiveness. The results support the Balanced Scorecard Theory, highlighting technology as a strategic enabler that improves operational efficiency and service delivery (Jabid et al., 2023). Empirical evidence corroborates these findings, with studies showing that electronic support systems and ICT infrastructure reduce cognitive workload and enhance task efficiency. Overall, technological support is crucial for performance in banking contexts.

5.0 SUMMARY OF THE STUDY

The study examined the effect of technological support systems on employee performance at ABSA Bank in Nairobi County. The analysis revealed that technological support systems significantly influence employee performance across several dimensions. The findings indicate that technology tools were adequate ($M = 4.2$, $SD = 0.80$) and significantly improved employee efficiency ($M = 4.3$, $SD = 0.76$). IT support availability ($M = 4.0$, $SD = 0.85$), reliable internet connectivity ($M = 4.1$, $SD = 0.79$), and effective cybersecurity measures ($M = 4.05$, $SD = 0.77$)

collectively created a conducive technological environment for employee performance. However, areas such as system upgrades and maintenance (M = 3.9, SD = 0.83) and continuous digital literacy training (M = 4.0, SD = 0.82) require further attention. Regression analysis confirmed a significant positive effect of technological support systems on employee performance ($\beta = 0.324$, $p < 0.001$), explaining 57.7% of the variation in performance. These results support the Balanced Scorecard Theory, which emphasizes the role of technology in enhancing learning, internal processes, customer satisfaction, and financial outcomes. Overall, investment in robust IT infrastructure, responsive support, cybersecurity, and training enables employees to perform effectively and contribute to organizational goals.

6.0 CONCLUSION

The study concludes that technological support systems are key drivers of employee performance at ABSA Bank in Nairobi County. The positive and significant relationship between technological support systems and employee performance indicates that investments in comprehensive IT infrastructure enhance productivity, task efficiency, work quality, and organizational commitment. ABSA Bank demonstrates a strong technological foundation through adequate tools, reliable internet connectivity, and effective cybersecurity measures. Nonetheless, improvements are needed in system maintenance and upgrades, as well as in providing continuous digital literacy training to employees. The study shows that effective technological support addresses critical challenges in banking, including operational efficiency, accuracy, customer service quality, and competitiveness. Employees who have access to proper tools, responsive IT support, secure systems, and ongoing training are better positioned to achieve performance targets and deliver high-quality services. Technological support systems influence performance by reducing manual workloads, improving access to information, facilitating collaboration, providing real-time feedback, and enabling data-driven decision-making. In the context of the Kenyan banking sector, such systems are essential for sustaining employee performance and ensuring organizational effectiveness in an increasingly digital environment.

7.0 RECOMMENDATIONS

Based on the findings, the study recommends that ABSA Bank strengthen technological support systems through structured maintenance and upgrade frameworks. This should include regular system updates, preventive maintenance, performance monitoring, and incident response protocols to ensure system reliability and minimize disruptions. Management should invest in enhancing employees' digital competencies through comprehensive training programs, department-specific skill development, mentorship initiatives, and accessible learning resources such as guides and tutorials (Mutuku & Nyaribo, 2015). Enhanced IT support mechanisms should be implemented, including dedicated helpdesk services, remote support, self-service portals, and feedback systems, ensuring timely resolution of technical issues (Ooko & Muchelule, 2024). The bank should also prioritize robust cybersecurity measures through regular protocol updates, multi-factor

authentication, employee awareness training, and security incident response planning (Samo et al., 2025). Additionally, performance monitoring systems leveraging technology, such as real-time dashboards, automated feedback mechanisms, and integrated analytics, should be adopted (Skrinjar et al., 2020). These measures will improve system utilization, enhance employee confidence, facilitate continuous performance improvement, and align individual efforts with organizational objectives.

8.0 AREAS FOR FURTHER RESEARCH

Future research should examine the long-term impact of technological support systems on employee performance using longitudinal designs. Studies could explore moderating factors such as employee skills, departmental differences, and organizational culture. Comparative research across multiple banks and investigations into emerging technologies would provide insights to enhance technology adoption, performance outcomes, and strategic decision-making.

9. REFERENCES

Absa Group. (2024). *Page 12 – Absa Group | Welcome to Absa Group Limited*. Absa Group | Welcome to Absa Group Limited. https://www.absa.africa/page/12/?device=c&term=inseadgemba_e

Alabi, M. (2025, February 1). *Technology Acceptance and Resistance: Understanding Employee Adaptation to Digital Tools*. Researchgate. https://www.researchgate.net/publication/388960193_Technology_Acceptance_and_Resistance_Understanding_Employee_Adaptation_to_Digital_Tools

Ayme, D., Li, K., Baptiste, J., & Dorian, P. (2025). Investigating the Impact of E-Banking, Employee Job Security, Innovativeness, and Productivity on Organizational Performance: Perspectives from South Africa. *Sustainable Futures*, 100605–100605. https://doi.org/10.1016/j.sftr.2025.100605

Chumpitaz, R., & Paparoidamis, N. G. (2020). The impact of service/product performance and problem-solving on relationship satisfaction. *Academia Revista Latinoamericana de Administración*, *33*(1), 95–113. https://doi.org/10.1108/arla-11-2018-0266

Huang, H.-C. (2019). Designing a knowledge-based system for strategic planning: A balanced scorecard perspective. *Expert Systems with Applications*, *36*(1), 209–218. https://doi.org/10.1016/j.eswa.2007.09.046

Irani, Z., Abril, R. M., Weerakkody, V., Omar, A., & Sivarajah, U. (2023). The impact of legacy systems on digital transformation in European public administration: Lesson learned from a multi case analysis. *Government Information Quarterly*, *40*(1), 101784. https://www.sciencedirect.com/science/article/pii/S0740624X22001204

Jabid, A. W., Rinto Syahdan, Johan Fahri, & Irfandi Buamonabot. (2023). The Role of Receiving Technology on Employee Performance: Job Satisfaction as Mediation. *Journal of Indonesian Economy and Business/Jurnal Ekonomi Dan Bisnis Indonesia*, *38*(3).

https://doi.org/10.22146/jieb.v38i3.5361

Jiang, H., Siponen, M., & Tsohou, A. (2021). Personal use of technology at work: a literature review and a theoretical model for understanding how it affects employee job performance. *European Journal of Information Systems*, *32*(2), 1–15. https://doi.org/10.1080/0960085x.2021.1963193

Limo, M. J. (2023). Influence of Digital Transformation on Supply Chain Performance of Absa Bank Plc in Kenya. *Uonbi.ac.ke*. http://erepository.uonbi.ac.ke/handle/11295/167072

Misati, R., Osoro, J., Odongo, M., & Abdul, F. (2022). Does digital financial innovation enhance financial deepening and growth in Kenya? *International Journal of Emerging Markets*. https://doi.org/10.1108/ijoem-09-2021-1389

Muikamba, J., & David, N. (2019). INFORMATION COMMUNICATION TECHNOLOGY CONSIDERATIONS AND STAFF PERFORMANCE IN THE PUBLIC SECTOR IN NYANDARUA COUNTY, KENYA. *International Academic Journal of Information Systems and Technology*, *2*(1), 183–205. https://www.iajournals.org/articles/iajist_v2_i1_183_205.pdf

Mutuku, M. N., & Nyaribo, Dr. W. M. (2015). Effect of Information Technology on Employee Productivity in Selected Banks in Kenya. *Review of Contemporary Business Research*, *4*(1). https://doi.org/10.15640/rcbr.v4n1a6

Ombajo , N., Ayoyi Isaac Renson, & Too Samson Kipketer. (2024). The Impact of Technology Adoption on Efficiency and Transparency in Public Procurement Processes in Kenya. *European Scientific Journal*, *25*. https://doi.org/10.19044/esipreprint.1.2024.p483

Ooko, N. K., & Muchelule, D. Y. (2024). DIGITAL BANKING TECHNOLOGIES AND FINANCIAL INCLUSION AMONG BANKS IN NAIROBI CITY COUNTY, KENYA. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, *8*(2). https://www.sagepublishers.com/index.php/ijssme/article/view/505

Saifi, H., & Saifi, F. (2025). Digital Transformation as a Socio-Economic Challenge: The Impact on the Commercial Bank Employees' Job Performance. *SocioEconomic Challenges*, *9*(3), 48–63. https://doi.org/10.61093/sec.9(3).48-63.2025

Samo, Y., Wanyama, K., & Okonda, M. (2025). Effect of Organizational Agility on Performance of Commercial Banks in Nairobi City County, Kenya. *International Journal of Strategic Management*, *4*(1), 47–65. https://doi.org/10.47604/ijsm.3335

Sharma, R. (2024). Technostress In The Digital World And Impact On Employee Work Performance And Mental Health. *Journal of Business Management and Information Systems*, *11*(2), 64–73. https://doi.org/10.48001/jbmis.1102005

Skrinjar, R., Vuksic, V., & Stemberger, M. (2020). The impact of business process orientation on financial and non-financial performance. *Business Process Management Journal*, *14*(5), 738–754. https://doi.org/10.1108/14637150810903084

Teng, X., Wu, Z., & Yang, F. (2022). Impact of the Digital Transformation of Small- and Medium-Sized Listed Companies on Performance: Based on a Cost-Benefit Analysis

Framework. *Journal of Mathematics*, *2022*(1), 1–14. https://doi.org/10.1155/2022/1504499

Wachira, E., & Ondigo, Mr. H. (2016). THE EFFECT OF TECHNOLOGICAL INNOVATION ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA. *International Journal of Finance and Accounting*, *1*(2), 61. https://doi.org/10.47604/ijfa.148