

Technology Processes and Business Performance of Commercial Banks in Kenya

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Abstract:- The general objective of the study was to examine the role of Technology Processes on business performance of Commercial Banks in Kenya. The philosophy that guided the research is positivism philosophy. The study adopted correlational research design. The target population was commercial Banks in Kenya register by the Central Bank of Kenya. The population consisted of all 42 commercial banks in Kenya. Respondents' population comprised of five top managers from each bank translating to 210 top managers. Slovin's formula was used to calculate the sample size. Purposive sampling technique was used to select 138 top managers of the 42 commercial Banks in Kenya. This study used a self-administered, closed and open-ended questionnaire to obtain primary data. A pilot study was conducted to test the validity and reliability of the data collection instrument. Quantitative data was collected and analyzed in this study by calculating the response rate with descriptive statistics such as mean, standard deviation, median and proportions using the Statistical Package for Social Sciences (SPSS) version 24). Regression analysis and correlation analysis was used to carry out inferential data analysis to determine the direction and strength of the relationship between the independent and the dependent variables. In order to test the influence of information technology capability on business performance of Commercial Banks in Kenya, the study employed a hierarchical regression analysis with moderation. The study results were presented through use of tables and figures. The study concludes that technology processes has a positive and significant effect on business performance of Commercial Banks in Kenya. The study revealed that idea generation, technology acquisition and technology Implementation influence business performance of Commercial Banks in Kenya. This implies that improvement in information technology processes (idea generation, technology acquisition and technology Implementation) would lead to improvement in business performance of Commercial Banks in Kenya. Based on the findings, the study recommends that the management of commercial banks in Kenya should ensure they have in place an effective plan for idea generation, technology acquisition and technology Implementation.

Keywords:- Information Technology Processes, Business Performance of Commercial Banks, Central Bank of Kenya.

I. INTRODUCTION

The dynamic interplay of evolving technologies, globalization, demographic shifts, and heightened regulatory scrutiny is reshaping the landscape of business. These transformations have ushered in a new era, brimming with fresh prospects, formidable challenges, and unprecedented risks for managers (Owuori, Ngala, & Obwatho, 2020). In today's volatile market, competition fuels swift and often unpredictable fluctuations in both demand and supply, far beyond what was previously experienced (Lu & Ramamurthy, 2011). The ability to swiftly perceive and adapt to market shifts, seizing opportunities and mitigating threats with agility and innovation, has become the cornerstone of organizational survival (Huang, Ouyang, Pan, & Chou, 2012).

The evolution of technology on a global scale has catalyzed the growth of numerous industries, notably the banking and finance sector. With an exponential increase in sensitive data, coupled with ever-changing consumer preferences and the adoption of modern technologies, there arises a pressing need for increasingly sophisticated IT solutions to propel the advancement of the banking industry (Almaryani & Sadik, 2012). Examining the significance of Management Information Systems (MIS) within the banking sector, Pilarczyk (2016) underscores that any lapses in these systems have the potential to severely disrupt a bank's operational efficiency. This vulnerability was starkly demonstrated in the case of the Royal Bank of Scotland in 2012, where a breakdown in banking systems halted operations for several hours, resulting in staggering losses estimated at around \$286 million due to outdated management software (Pilarczyk, 2016).

Research conducted across Brazil, Peru, and Colombia reveals a gradual uptake of agent banking in the initial two years, followed by a notable surge in the third or fourth year. However, insights gleaned from Mexico's inaugural year of agent banking suggest a swift acceleration in the number of banking agents during the initiative's second year, comparable to the growth witnessed in Colombia's fourth year and Peru's sixth. The introduction of new regulations in Mexico, permitting a broader spectrum of financial institutions to engage in operations via bank agents and facilitating the opening of savings accounts, is poised to significantly bolster financial inclusivity and position Mexico as a frontrunner in agent banking across Latin America (Celina, 2012). A survey conducted by Sainsbury

underscores that customers exhibit a greater inclination to entrust a bank equipped with the appropriate technology.

As per Lout, Skina, Elena, and Strahan (2009), the adoption of innovative product development has significantly bolstered the resilience of most institutions. However, in developing nations, a staggering three billion individuals still lack access to basic financial services, with Sub-Saharan Africa experiencing acute deprivation, where only five to twenty-five percent have formal ties with financial institutions (FSD, 2018). The International Monetary Fund (2012) emphasizes that a financially deep economy is characterized by reliable, efficient, and easily accessible banking services, fostering the integration of financial players with the overarching goal of stimulating economic growth and development. Additionally, according to Goyal, Marsh, Narayanan, Wang, and Ahmed (2011), financial deepening facilitates the formal incorporation of informally banked funds into established banking systems, thereby expanding access to loan services for those in need of financing.

The regulatory framework governing the banking sector in Kenya is comprised of several statutes, including the Companies Act, the Banking Act, and the Central Bank of Kenya Act, alongside various prudential guidelines and policies issued by the Central Bank of Kenya (CBK) (CBK, 2011). Initiating in 1994, the banking sector in Kenya underwent significant reforms following the collapse of multiple banks. This led to the liberalization of the financial sector in 1995, marked by the lifting of exchange controls and other regulatory regimes. Despite facing intense market competition, banks in Kenya have demonstrated robust financial performance, with institutions consistently achieving satisfactory results and improving their financial standings as they vie for substantial market shares.

Driven by evolving market demands, financial institutions have embraced innovation and technology to adapt to changing landscapes. Commercial banks in Kenya, in particular, have spearheaded various financial innovations that have profoundly impacted their financial performance. These innovations encompass a range of services, including mobile and internet banking, Real-Time Gross Settlement (RTGS), ATM withdrawals and deposits, online account opening, and unsecured lending, among others. The adoption of these financial innovations has played a pivotal role in expanding customer bases, fortifying capital reserves, and augmenting profitability for commercial banks. Consequently, these advancements have significantly bolstered their overall financial performance.

According to Mwangi (2013), prioritizing customer interests is crucial in the development of innovative products, even amidst the turbulence of the business environment. He contends that the adoption of new innovations is indispensable for achieving success. Similarly, Joshua (2010) advocates for the consideration of all stakeholders' interests in order to attain the net present value of investment projects. He emphasizes that commercial banks, driven by the aim to enhance efficiency,

must prioritize customer needs and ensure the ease of use for new developments.

In Kenya, the financial innovation landscape faces fierce competition from telecommunications companies, particularly Safaricom's M-Pesa services. This innovation is lauded for its user-friendly interface, which has significantly elevated the scope of financial innovation, even extending to the provision of overdraft facilities for its users. As noted by Weil, Mbiti, and Mweya (2012), financial innovations have notably decreased turnaround times for banking services such as withdrawals, deposits, and loan approval processes.

II. STATEMENT OF THE PROBLEM

The significance of technological capability in enhancing organizational performance has been underscored by Zhou, Yim, and Tse (2019). Consequently, many successful organizations worldwide rely heavily on their technological prowess to efficiently execute their day-to-day business processes and operations (Ajonbadi, 2018). According to Bharadwaj (2018), J.-S. Chen and Tsou (2021), and Zeng and Lu (2020), the ability of organizations to harness, cultivate, and refine their IT capabilities is paramount (Bharadwaj, 2019). IT capabilities have the potential to revolutionize organizations by exerting influence on decision-making and execution through innovative means.

The improper implementation of technological capabilities has led to various detrimental outcomes, including unnecessarily high operational costs, disjointed business activities, failure to achieve domestic policy objectives, and challenges in attracting and retaining skilled professionals (Zahra et al., 2019). Several studies have delved into the realm of IS/IT capabilities, shedding light on their implications. For instance, Akinbola, Adeniyi, and Oluwatosin (2017) examined IS capabilities in telecommunication service businesses in Nigeria, while Bhatt and Grover (2019) explored the role of information technology capabilities in generating competitive advantage. Additionally, Oh and Kim (2021) investigated the managerial capabilities of Information Technology and their impact on firm performance.

Mugambi and Kinyua (2020) conducted a study examining the impact of innovation capability on organizational performance within the Commercial Banks of Nairobi City County, Kenya. Their research delved into product innovation, service innovation, and service innovation dimensions. In contrast, the current study investigates the effects of Information Technology (IT) capability, specifically Information Technology Strategy, Information Technology Processes, Information Technology Organization, and Information Technology Infrastructure capabilities, on organizational performance. Meanwhile, Kamau, Senaji, Eng, and Nzioki (2019) aimed to determine the influence of Information Technology Capability on the competitive advantage of the banking sector in Kenya. Their study was grounded in the McKinsey 7S Framework Model and focused on 39 operational commercial banks in Kenya,

employing a descriptive survey design. In this study, we explore the impact of IT capability on both financial and non-financial performance metrics of Commercial banks, while incorporating various dimensions of Information Technology Capability and relevant theoretical frameworks.

An underexplored facet of this field lies in the dynamics surrounding the implementation of Information Technology (IT) capabilities, including Information Technology Strategy, Information Technology Processes, Information Technology Organization, and Information Technology Infrastructure, posing a compelling area for further research (Lu & Ramamurthy, 2011). Studies have highlighted that a firm's capacity to effectively harness its IT investments through the cultivation of robust IT capabilities can yield improvements in firm performance. Pertinent literature delves into various concepts, such as managerial capability and organizational performance (Conyers, 2017), dynamic capability and competitive advantage (Rudolf, 2019), and the relationship between innovation and performance (Kauzya, 2020).

Despite the evolving nature of firms' technological capabilities, existing studies often overlook the comprehensive analysis of Information Technology Strategy, Information Technology Processes, Information Technology Organization, and Information Technology Infrastructure capabilities, and their impact on the business performance of Commercial Banks in Kenya. This gap underscores the necessity for conducting research to explore the significance of Technology Processes in shaping the business performance of Commercial Banks in Kenya.

III. OBJECTIVES OF THE STUDY

A. General Objective

To examine the role of Information Technology Processes on business performance of Commercial Banks in Kenya.

B. Theoretical Framework

➤ Resource-Based View Theory

The Resource-Based View (RBV) underlines the significance of cultivating distinct, difficult-to-replicate, and differentially dispersed capabilities as the foundation of competitive advantage (Colbert, 2004). According to RBV, resources and capabilities are amalgamated to forge higher-level capabilities. Grant (1995) delineates a hierarchical structure of organizational capabilities, wherein specialized capabilities converge to form broader functional capabilities like marketing, manufacturing, and IT capabilities. These functional capabilities, in turn, coalesce to establish cross-functional capabilities such as new product development or customer support capabilities.

Das and Teng (2000) posit that a resource-based view underscores the importance of maximizing firm value by efficiently integrating resources with those of partners to

garner competitive advantages and value that would otherwise be inaccessible to the firm. Dyer and Singh (1998) describe complementary resource endowment as a unique resource possessed by alliance partners that collectively yield greater returns than the sum of those derived from the individual endowments of each partner. Initially, firms must identify each other and acknowledge the potential value of pooling resources.

The Resource-Based View (RBV) posits that competitive advantages stem from the development and utilization of unique, valuable, inimitable, and irreplaceable resources (Barney, 1991; Wernerfelt, 1984). By identifying and acquiring resources that are pivotal to markets and aligning with strategic objectives, a firm can achieve above-normal returns, as these strategic resources are essential components of sustainable competitive advantage according to RBV. RBV has proven to be a valuable framework for examining the significance of Information Technology (IT) and its correlation with firm performance and competitive advantage, leading many scholars to acknowledge its relevance in IT research (Wernerfelt, 1984).

Taking a resource-based perspective, scholars argue that various Information Technology (IT) capabilities can serve as sources of competitive advantage (Bharadwaj, 2000; Mata, Fuerst, and Barney, 1995). However, there has been a scarcity of studies delving into the resource-based view of IT, with most analyses thus far being primarily conceptual (Bharadwaj, 2000). According to the resource-based view (RBV) of a firm, enterprises must develop IT capabilities by integrating IT infrastructure, IT human resources, and IT-enabled intangible resources to attain sustainable competitive advantages (Taher, 2012). The literature suggests that isolated capabilities or resources of an enterprise lack value, but demonstrate value when effectively utilized (Sabherwal, Sabherwal, Havakhor, & Steelman, 2019).

Previous research grounded in the Resource-Based View (RBV) has yielded varied findings regarding the relationship between IT capabilities and the financial performance of firms, particularly in terms of profits and costs. In order to reconcile these inconsistent results and gain deeper insights into the impact of IT capabilities on firm performance, studies have categorized IT capabilities into different types (Bharadwaj, 2000; Stoel and Muhanna, 2009). For example, certain studies (e.g., Chen and Ong, 2015; Stoel and Muhanna, 2009) have segmented IT capabilities into internally and externally focused categories based on where and how IT resources are utilized to support business processes. In this study, we adopt this typology to categorize marketing capabilities.

C. Conceptual Framework

The conceptual framework shows the anticipated relationship between Technology process and firm performance (dependent variable).

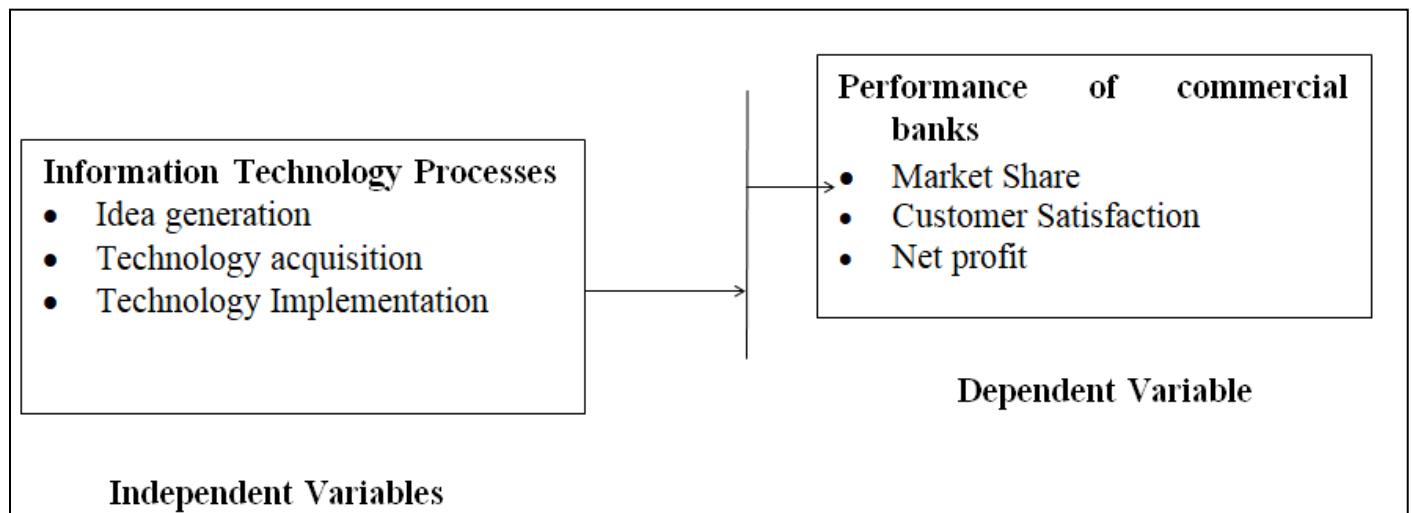


Fig 1: Conceptual Framework

D. Empirical Review

➤ Information Technology Processes

Many companies have embraced and implemented Information Technology (IT) capabilities to effectively manage information through collection, processing, storage, and retrieval processes (Basheer et al., 2016; Galliers et al., 2020). IT adoption has empowered companies to seize opportunities and mitigate threats, while also illuminating the strengths and weaknesses of their business strategies (Chu et al., 2019). Consequently, integrating IT within businesses enables a deeper understanding of external environmental dynamics and facilitates the processing of incoming data to predict external factors (Lu & Ramamurthy, 2011).

IT capabilities encompass integrated strategies and activities, akin to business ventures. Through IT-based integrated processes, firms can streamline the collection and dissemination of information by electronically integrating diverse business activities (Hilman & Kaliappen, 2015). The integration of IT facilitates the sharing of pertinent information for entrepreneurial processes and practices across departments (Cegarra-Navarro et al., 2016). This information is instrumental in introducing or launching new business ventures within the firm (Zahra & Covin, 1995).

Firms striving for sustainable competitive advantage must prioritize the attraction, development, motivation, and retention of employees who can contribute to achieving the firm's strategic objectives. Therefore, a firm equipped with IT human resources possessing technical, business, and interpersonal skills is poised to attain successful sustainable competitive advantages (Wang, Liang, Zhong, Xue, & Xiao, 2012).

There are three primary types of knowledge management systems that support IT processes: enterprise-wide knowledge management systems, knowledge work systems, and intelligent techniques (Laudon&Laudon, 2013). When an organization develops knowledge management into a distinctive competence, it is anticipated

to serve as a precursor to achieving superior competitive advantage in the marketplace (Iza&Dentoni, 2020). In smart companies, where employees are regarded as the driving force behind organizational intelligence, IT plays a crucial role in impacting employees (Azma et al., 2012; Daña et al., 2020). Key factors contributing to organizational intelligence include sound organizational structures, adept managers, products and processes tailored to the work environment's demands, cohesive tasks, a clear mission, core values, and defined roles that outline employees' rights and performance.

A proactive approach reflects a company's capacity to actively explore and pursue IT solutions and innovations, seeking novel avenues to enhance IT capabilities while aligning with the company's vision (Panda & Rath, 2018). It involves crafting a strategic IT vision aimed at embracing emerging technologies to bolster and fortify IT infrastructure (Jorfi et al., 2017). This approach signifies the organization's significant potential to adapt its internal environment in response to rapid external environmental changes, fostering a culture conducive to stimulating processes that engage employees to tackle challenges and explore new opportunities (Chae et al., 2014).

IT process capabilities encompass the continuous exploration of innovative methods by organizations to harness and optimize their IT potential, enabling them to capitalize on diverse market opportunities (Antoni et al., 2020). Consequently, organizations become adept at defining, selecting, and monitoring IT advancements (Swanson and Ramiller, 2004). This enables organizations to anticipate and adapt to significant changes driven by the rapid progress of IT. As highlighted by Galliers (2007), this dimension enables organizations to swiftly identify and seize relevant opportunities using IT innovations to bridge the gap between business strategy and the imperative for timely and pertinent information. Given the inherent heterogeneity among firms in developing and nurturing IT capabilities, they are likely to exhibit varying capacities in leveraging information systems (IS) to enhance their competitiveness (Jorfi et al., 2017).

IV. RESEARCH METHODOLOGY

A. Research Philosophy

This research was guided by Positivism. Positivism is a philosophical perspective and approach to knowledge that emphasizes empirical observation, scientific method, and the objective analysis of data (Mulwa 2013). Positivism holds that knowledge should be derived from empirical observation and sensory experience. It emphasizes the importance of gathering data through direct observation or measurement rather than relying on speculation or intuition (Saunders *et al.*, 2007).

B. Research Design

The study used descriptive design. Descriptive research design serves as a fundamental approach in the realm of research methodology, offering crucial insights and advantages in various fields. Its significance lies in its ability to systematically describe and summarize characteristics, phenomena, or trends within a population or sample (Mohajan, 2018). Sekaran and Bougie (2010) indicates that descriptive research allows researchers to gain a comprehensive understanding of a particular phenomenon or subject. By providing detailed descriptions and summaries, it helps researchers to explore the intricacies and nuances of the topic under investigation

C. Target Population

The target population was commercial Banks in Kenya register by the Central Bank of Kenya. The population consisted of all 42 commercial banks in Kenya. Respondents' population comprised of five top managers from each bank translating to 210 top managers. The top managers were targeted because top managers of a firm mostly handle strategic management issues.

D. Sample Size and Sampling Technique

Sample size refers to the number of individual subjects or units selected from a larger population for inclusion in a research study or experiment. It is a critical aspect of research design, as the size of the sample directly affects the validity and reliability of the study's findings (Mugenda & Mugenda, 2003). Respondents' population comprised of five top managers from each organization translating to 210 top managers. Slovin's formula (1960) was applied as illustrated:

$$n = N / (1 + Ne^2),$$

Where;

n = Sample Size

N = Total Population

e = Error of Tolerance with a confidence level of 95 % (giving a margin error of 0.05)

$$n = 210 / (1 + 210 * 0.05 * 0.05) = 138$$

Hence, the sample size was 138.

E. Data Collection Instruments

This study employed a self-administered questionnaire, comprising both closed and open-ended questions, to gather primary data. Additionally, secondary data regarding the performance of commercial banks was gathered, guided by predefined parameters. These parameters were established by the researcher, drawing upon information supplied by the respondents. The selection of a questionnaire as the data collection instrument for this study was deliberate, driven by its practicality and efficiency in gathering information from a large number of individuals within a relatively short timeframe. Moreover, questionnaires offer the advantage of facilitating scientific and objective analysis compared to other research methods (Kothari, 2004).

F. Pilot Study

A pilot test was conducted to identify any weaknesses in the instrumentation and to gather proxy data for selecting a probability sample. The pre-testing procedure for the questionnaire mirrored that of the actual study and data collection process. Cooper and Schindler (2011) recommend that the pre-test sample size should be relatively small, ranging from 1% to 10% of the total sample size. In adherence to this guideline, 21 respondents, constituting 10% of the sample size, participated in the pilot study. Notably, these participants were not included in the main survey.

G. Data Analysis and Presentation

Quantitative data collection and analysis were conducted in this study utilizing the Statistical Package for Social Sciences (SPSS) version 24. Descriptive statistics, including measures such as mean, standard deviation, median, and proportions, were calculated to provide an overview of the data. Additionally, regression analysis and correlation analysis were employed for inferential data analysis to ascertain the direction and strength of the relationship between the independent and dependent variables. To examine the influence of Information Technology Processes on the business performance of Commercial Banks in Kenya, hierarchical regression analysis with moderation was utilized. This approach allows the researcher to determine the sequence in which variables are entered into the regression equation (Yeomans, 2017).

V. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

A. Descriptive Statistics Analysis

➤ Technology Processes and Performance of Commercial Banks

The second specific objective of the study was to determine the role of Technology Processes on business performance of Commercial Banks in Kenya. The respondents were requested to indicate their level of agreement on Technology Processes and business performance of Commercial Banks in Kenya. The results were as shown in Table 1.

Table 1: Technology Processes

	Mean	Std. Deviation
We develop new markets together with partners through IT	3.996	0.865
Our bank make better use of internet-based business opportunities	3.959	0.945
Our bank has integrated business process by using digital technologies (such as big data, cloud computing, and social platforms)	3.938	0.611
We have established a new cooperative business process (e.g., electronic ordering) with partners	3.931	0.908
Our bank provides a seamless connection between our partner systems and our systems.	3.911	0.776
The bank endeavors at improving work for employees' capabilities to achieve the best productivity goals and performance	3.875	0.897
We have improved communication and productivity between the business and IT department.	3.843	0.786
There is better coordination and integration of information flow and activities within and/or between the bank boundaries	3.832	0.857
Existing systems support ICT integration to business processes	3.786	0.756
The existing system infrastructure enables quality service delivery to our customers	3.752	0.821
Customers can access the organization's information systems when they need banking services	3.678	0.852
Aggregate	3.762	0.841

From the results, the respondents agreed that they develop new markets together with partners through IT (M=3.996, SD=0.945). In addition, the respondents agreed that their bank make better use of internet-based business opportunities (M=3.959, SD=0.945). Further, the respondents agreed that their bank has integrated business process by using digital technologies (such as big data, cloud computing, and social platforms)(M=3.938, SD=0.611).

The respondents also agreed that they have established a new cooperative business process (e.g., electronic ordering) with partners (M=3.931, SD=0.908). The respondents agreed that their bank provides a seamless connection between our partner systems and their systems (M=3.911, SD=0.776). The respondents agreed that the bank endeavors at improving work for employees' capabilities to achieve the best productivity goals and performance (M=3.875, SD=0.897). The respondents agreed that they have improved communication and productivity between the business and IT department(M=3.843, SD=0.786).

From the results, the respondents agreed that there is better coordination and integration of information flow and activities within and/or between the bank boundaries (M=3.832, SD=0.857). In addition, the respondents agreed that existing systems support ICT integration to business processes(M=3.786, SD=0.756). Further, the respondents agreed that the existing system infrastructure enables quality service delivery to our customers (M=3.752, SD=0.821). This is shown by a mean of 3.752 (std. dv = 0.821). The respondents also agreed that customers could access the organization's information systems when they need banking services (M=3.678, SD=0.852).

The findings are consistent with Chu et al. (2019), who observed that Information Technology (IT) has bolstered companies' capacity to capitalize on opportunities and mitigate threats. Additionally, IT aids in identifying the strengths and weaknesses of business strategies (Chu et al., 2019). Consequently, integrating IT into businesses facilitates a deeper understanding of the external environment and provides insights into processing incoming data to predict external environmental factors (Lu & Ramamurthy, 2011).

IT-based integrated processes streamline the efficient collection and dissemination of information by electronically integrating diverse business activities (Hilman & Kaliappen, 2015). This integration of IT facilitates the sharing of pertinent information across departments for entrepreneurial processes and practices (Cegarra-Navarro et al., 2016). Such shared information is instrumental in introducing or launching new business ventures within the firm (Zahra &Covin, 1995).A proactive stance reflects the company's adeptness in exploring and seeking IT solutions and innovations to enhance IT capabilities in alignment with the company's vision (Panda &Rath, 2018). This entails developing a strategic vision for IT that embraces new technologies to strengthen IT infrastructure (Jorfi et al., 2017).

➤ *Business performance of Commercial Banks in Kenya*

The respondents were requested to indicate their level of agreement on various statements relating to business performance of Commercial Banks in Kenya. The results were as presented in Table 2.

Table 2: Business performance of Commercial Banks in Kenya

	Mean	Std. Deviation
Service delivery in commercial banks has improved over time	4.084	0.997
Adoption of information technology capability has enhanced competitive advantage of commercial banks	3.917	0.831
Am satisfied with the level of competitive advantage in our organization	3.898	0.563
There are few customer complaints on the quality of services offered by our organization	3.851	0.851
The net profit has increased with technology implementation	3.832	0.923
Generally, quality of service delivery has improved hence contributing positively to bank annual profitability	3.795	0.865
Am satisfied with the level of performance of in our organization	3.767	0.785
Adoption of IT capability has improved the market share of commercial banks	3.721	0.821
Net profit of commercial banks has been increasing as a result of adopting information technology capabilities	3.698	0.828
Aggregate	3.766	0.858

From the results, the respondents agreed that service delivery in commercial banks has improved over time (M=4.084, SD=0.997). In addition, the respondents agreed that adoption of information technology capability has enhanced competitive advantage of commercial banks (M=3.917, SD=0.831). Further, the respondents agreed that they are satisfied with the level of competitive advantage in their organization (M=3.898, SD=0.563). The respondents also agreed that there are few customer complaints on the quality of services offered by their organization (M=3.851, SD=0.851).

The respondents agreed that the net profit has increased with technology implementation (M=3.832, SD=0.923). In addition, the respondents agreed that generally, quality of service delivery has improved hence contributing positively to bank annual profitability (M=3.795, SD=0.865). Further, the respondents agreed that they are satisfied with the level of performance of their organization (M=3.767, SD=0.785). The respondents also agreed that adoption of IT capability has improved the market share of commercial banks (M=3.721, SD=0.821). The respondents also agreed that net profit of commercial banks has been increasing as a result of adopting information technology capabilities (M=3.698, SD=0.828).

B. Correlation Analysis

Table 3: Correlation Coefficients

		Organization Performance	Technology Processes
Organization Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	131	
Technology Processes	Pearson Correlation	.856**	1
	Sig. (2-tailed)	.001	
	N	131	131

The findings indicate a highly significant relationship between technology processes and the business performance of Commercial Banks in Kenya (r = 0.856, p value = 0.001). This relationship was deemed significant as the p-value of 0.001 was lower than the conventional significance level of

The findings corroborate with the observations made by Basheer et al. (2016) and Galliers et al. (2020), indicating that many companies have developed and widely adopted IT capabilities to effectively manage information through collection, processing, storage, and retrieval processes. IT has significantly enhanced companies' capacity to seize opportunities and mitigate threats. Additionally, IT plays a crucial role in identifying the strengths and weaknesses of business strategies (Chu et al., 2019). Therefore, the integration of IT within businesses facilitates a deeper understanding of the external environment and provides insights into processing incoming data to predict external environmental factors (Lu & Ramamurthy, 2011).

According to Hadj et al. (2020), IT capabilities play a fundamental role in achieving competitive advantage, potentially offering insights into the perplexing phenomenon of the opposing effects of IT capabilities on competitive advantage. IT capabilities furnish the essential hardware and software required for establishing networks that facilitate firm innovation. The proper implementation of IT infrastructure has enabled firms to deploy suitable applications at opportune moments, thereby expanding avenues for technological innovation (Sambamurthy, Bharadwaj, & Grover, 2003).

0.05. These results align with the findings of Muiruri and Were (2016), who similarly observed a strong correlation between technology processes and organizational performance.

Table 4: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.341	0.089		3.831	0.000
	Technology Processes	0.387	0.095	0.386	3.949	0.000

a Dependent Variable: Organization Performance

The regression model was as follows:

$$Y = 0.341 + 0.387X_1 + \epsilon$$

The results also revealed that Technology Processes has significant effect on business performance of Commercial Banks in Kenya, $\beta_1=0.387$, p value= 0.000). The relationship was considered significant since the p value 0.000 was less than the significant level of 0.05. The findings conform to the findings of Muiruri and Were (2016) that there is a very strong relationship between technology processes and organization performance.

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

The study concludes that technology processes has a positive and significant effect on business performance of Commercial Banks in Kenya. The study revealed that idea generation, technology acquisition and technology Implementation influence business performance of Commercial Banks in Kenya. This implies that improvement in information technology processes (idea generation, technology acquisition and technology Implementation) would lead to improvement in business performance of Commercial Banks in Kenya.

B. Recommendations

The study found that information technology processes (idea generation, technology acquisition and technology Implementation) influence the business performance of Commercial Banks in Kenya. This study therefore recommends that the management of commercial banks in Kenya should ensure they have in place an effective plan for idea generation, technology acquisition and technology Implementation.

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