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Uptake of Digital Organizational Innovations on Financial Performance of Commercial Banks in Kenya

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Abstract

The rapid evolution of digital innovations has globally transformed the banking sector, with commercial banks in Kenya experiencing significant operational changes driven by these advancements. Despite the substantial benefits associated with digital innovations, there remains a gap in understanding the precise influence of organizational innovations on the financial performance of commercial banks. This gap is exacerbated by a lack of comprehensive empirical studies that systematically examine the relationship between digital organizational innovations and financial performance within the Kenyan banking sector. Navigating the dynamic regulatory landscape poses a significant challenge as the industry strives to balance innovation with compliance, thereby potentially dampening the enthusiasm of commercial banks to fully embrace transformative digital initiatives. This study aimed to assess the influence of digital organizational innovations on the financial performance of commercial banks in Kenya, the Evolutionary Theory of Economic Change was used to assist in explaining the objective. Adopting a positivist philosophy, the study targeted a population of 1,470 employees across 39 commercial banks in Kenya, utilizing a stratified random sampling technique to select a sample size of 315 participants, including senior management, supervisory management, and junior officers. A descriptive research design was employed, using structured questionnaires to collect primary data, while secondary data was sourced from banking sector supervisory and innovation survey reports. A pilot test was conducted to estimate reliability using Cronbach's Alpha, and content validity was assessed with the Kaiser-Meyer-Olkin measure and Bartlett's test of sphericity. Descriptive analysis was presented using frequency tables and bar graphs. A panel linear regression model was applied, revealing that 76% (R²=0.761, F=822.691, P<0.0001) of the variations in return on equity (ROE) for commercial banks were explained by digital

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organizational innovations. The findings demonstrated a positive and significant correlation between the adoption of digital innovations and the financial performance of commercial banks (P<0.05). The study recommends that commercial banks explore new business models through access to innovative technologies, foster strategic collaborations, and remain aligned with regulatory requirements to enhance financial performance significantly. Embracing a culture of experimentation and agile management policies can help flatten hierarchies that inhibit innovation. Policymakers are encouraged to provide clear guidelines and a harmonized regulatory environment to foster enthusiasm for transformative digital initiatives. The study's findings may not generalize to other industries or geographical contexts due to variations in regulatory frameworks, market structures, cultural norms, and technological infrastructure. Consequently, the study proposes comparative research across diverse contexts to assess the generalizability of these findings.

Keywords: Organizational innovations, Government policies, financial performance, innovative collaborations, transformative digital initiatives, flatten hierarchies.

1.0 Introduction

The concept of innovation in an organization is described as implementing a new or significantly improved product or process, a new marketing channel, or new organizational procedures in business practices, workplace organizations, or external relations (OECD, 2005; Amidjaya & Widagdo, 2020). According to Hoxha and Kleinknecht (2020), organization structures, progressive organizational culture, a flexible work environment, and decentralization of decision-making are key organizational innovations to improve firms' performance. Globally, Sipos, and Ionesco (2018) did a study of over 115 countries and argued that restructuring traditional organizational structures and cultures is vital to foster a conducive environment for digital transformation and innovation. Through the cultivation of a culture of innovation, investment in employee training and development, and the establishment of cross-functional collaboration, commercial banks can foster agility and adaptability in the face of technological disruptions (Klus et al., 2019).

In Europe, Schulz-Knappe et al. (2019) conducted an online survey of 608 German employees, finding that government fiscal policies impact commercial banks' performance. Fiscal stimuli like infrastructure investments or tax incentives boost economic growth and bank performance, while austerity measures or tax hikes reduce consumer spending and credit demand, affecting bank revenues. Soewarno and Tjahjadi (2020) studied innovation and performance in Indonesian organizations, showing that holistic assessments of financial, operational, strategic, and stakeholder-related aspects enhance effectiveness, profitability, and long-term value. Adner and Zemsky (2016), in their study, found that banking digital inclusion in China has led to sustainable development supported by policies and regulations, with China now ranking highest among developing countries in the innovation index (GSMA, 2020). Aluko and Ajayi (2018) note that Angola's minimum capital requirement gap for banks is only USD 1 million, encouraging competition. In contrast, Zambia's requirements are USD 20 million for local banks and USD 100 million for foreign banks, significantly higher. Roseline et al. (2021) highlight that technological advancements disrupt the banking industry, challenging banks to adapt, integrate

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digital solutions, and compete with fintechs. Banks must invest in digital transformation and enhance agility to succeed (Kholi & Melville, 2019; Roseline et al., 2021; Rehman, 2021).

According to Coetzee (2018), the link based on digital technological advancement and bank performance faces difficulties in Kenya. While digital innovations boost efficiency, market reach, and customer experience, they also bring challenges like cybersecurity risks, regulatory compliance, and digital divide concerns (Fasano & La Rocca, 2021). The general objective of this study was to assess the effect of the uptake of digital innovations on the financial performance of commercial banks in Kenya. The specific objective was to analyze the effect of the uptake of digital organizational innovations on the financial performance of commercial banks in Kenya. In analyzing quantitative data, the aim of the study is realized, thus enabling the testing of the hypothesis that the uptake of digital organization innovations has no significant influence on the financial performance of commercial banks in Kenya. The decision-making process by which organizational innovation is made was not out of scope and was therefore not investigated in this study. The study mainly focused on perspectives on uptake and effectiveness from the user's point of view (employees). It was anchored on Teece et al.'s (1997) Theory of Dynamic Capabilities. The theory elucidates the need for the commercial banks in Kenya to integrate, build, and reconfigure their internal and external competences to address issues around organizational re-engineering, manage change, and enhance knowledge transfer through collaboration with other players in the industry.

Statement of The Problem

Globally, progress towards digital innovations is indispensable to the banking sector (Hoxha et al., 2020). The uptake of digital innovations has become imperative in the Kenyan banking sector to improve financial performance. According to GMSA (2020), 83% of the Kenyan population has access to mobile application solutions from various financial service providers. Despite the momentous benefits associated with digital innovations, a gap persists in realizing the precise influence of organizational innovations on the financial performance of commercial banks (Misati et al., 2019). The gap is further aggravated by a lack of extensive empirical studies that methodically assess the relationship between organizational innovations and the financial performance of commercial banks within the context of digital innovations in the Kenyan banking sector (Roseline et al., 2021). Maneuvering ever-changing government policies poses a daunting challenge as industry seeks to balance innovation and compliance, thereby dampening the zeal of commercial banks to embrace transformative digital initiatives (Rao, 2021). The uptake of organizational innovation necessitates organizational changes. However resistant to change, data privacy and security, new competitive business models, regulatory complexities, and varying levels of literacy among both bank employees and customers pose a significant challenge (Ndungu & Muturi, 2019; CBK, 2022). Exploring strategies to overcome these barriers and foster a culture of innovation within commercial banks is paramount to realizing the full potential of digital transformation and harnessing digital technologies effectively in commercial banks.

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Research Objectives

- (i) To analyze the effect of uptake of digital organizational innovations on financial performance of commercial banks in Kenya.
- (ii) To assess the moderating effect of government policy on the relationship between uptake of digital innovations and financial performance of commercial banks in Kenya

Research Hypotheses

H₀1: Uptake of digital organizational innovations has no significant influence on financial performance of commercial banks in Kenya.

H₀2: There is no significant moderating effect of government policy on the relationship between uptake of digital innovations and financial performance of commercial banks in Kenya.

2.0 Literature Review

Empirical review: Organizational Innovation on Financial Performance of Commercial Banks Annarelli and Nonino (2016) describe organizational innovations as reshaping business practices, workplace organizations, and external relations. In commercial banks, this innovation entails adopting better organizational structures, processes, and practices to enhance efficiency and agility, responding to market shifts, customer demands, regulations, and technological advancements, and ultimately enhancing return on equity (ROE). Shahul Hameed et al. (2022) did a study on "Examining Business Process Reengineering's Impact on Organizational Performance Amid the COVID-19 Pandemic: The Role of Strategic Thinking" in Malasysia. The study employs partial least squares structural equation modeling to analyze data gathered from 103 samples via a survey of electronics manufacturing companies listed in the Federation of Malaysia Manufacturers' directory. While business process reengineering dimensions exhibit significant positive impacts on organizational performance, their effects are amplified when strategic thinking is present within the organization, emphasizing the importance of strategic alignment during crises like the coronavirus pandemic. Key dimensions of business process reengineering, including top management commitment, organizational readiness for change, information technology capabilities, and people management, positively influence organizational performance. Managers in the Malaysian electronics manufacturing industry should focus on dimensions of business process reengineering that positively impact organizational performance.

In Egypt, Abdo and Edgar (2021) explored the role of bricoleurs in achieving organizational innovations during the COVID-19 pandemic in Egypt's banking sector. Through qualitative research with six general managers from multinational banks, they identified improvisation as a key competency within Senge's learning organization framework. Improvisation, rooted in creativity, experience, and intuition, emerged as essential amid resource constraints. Despite qualitative research limitations, the study underscores the importance of leveraging improvisation as a vital innovation competence. General managers are urged to adopt strategies that embrace improvisation to effectively navigate the challenges posed by the pandemic in the Egyptian banking sector.

In Kenya's banking sector, Mwai et al. (2019) investigated the moderating effects of bank size on the relationship between financial innovation adoption and financial deepening. Using the

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Technology Acceptance Model, they examined perceptions and usage of technology among all listed commercial banks over five years. Results indicated a significant relationship between financial innovation adoption and financial deepening, with bank size moderating this association. The study underscores the importance of supporting financial innovation initiatives, emphasizing policymakers and regulators' role in promoting integration. However, it lacks exploration of organizational innovations influencing financial innovation adoption, such as culture and leadership styles. Hypothesized constructs and paths were depicted as below:

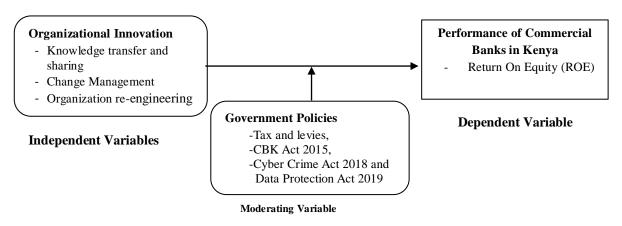


Figure 1: Conceptual Framework

3.0 Materials and Methods

This section outlines the methodology used in the study, detailing the research philosophy, design, target population, sampling techniques, pilot study, and data collection methods. It provides a comprehensive overview of how the research was conducted, emphasizing the systematic approach taken to achieve the study's objectives (Creswell & Poth, 2015). Research philosophy refers to the beliefs about how data should be gathered, analyzed, and used (Korableva, 2016). It forms the foundation for research methods and guides the framing of research questions. The study adopts a positivist approach, which emphasizes empirical observation and the scientific method (Creswell & Poth, 2015). Positivism focuses on observable phenomena and aims for objectivity and neutrality, often utilizing quantitative methods (Wang & Cheng, 2020). The study integrates theories such as Roger's diffusion of innovation and dynamic capabilities, serving as a framework for analysis (Shrikant, 2019).

A descriptive research design was employed, allowing for the analysis of variables at a single point in time (Kesmodel, 2018). This design facilitated cross-sectional comparisons across different commercial banks in Kenya, focusing on correlation coefficients to identify relationships between variables (Wang & Cheng, 2020). The study targeted 1,470 employees across 39 commercial banks in Nairobi, categorized into senior management, supervisory management, and junior officers (CBK, 2022). A stratified random sampling technique ensured

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representative samples from each management level. The sample size, calculated using Slovan's formula, consisted of 315 respondents (McGaghie et al., 2015).

Data was collected using structured questionnaires, which facilitated efficient data gathering and ensured respondent confidentiality (Cai et al., 2021). The questionnaires included closed-ended and Likert scale questions to gather both quantitative and qualitative data. A pilot study at Kingdom Bank tested the research instruments for reliability and validity, with adjustments made based on feedback (Shrikant, 2019). Reliability was assessed using Cronbach's alpha, with a threshold of 0.7 indicating acceptable reliability (Shrestha, 2020). Data analysis involved coding, cleaning, and processing using SPSS version 26. Descriptive statistics, ANOVA, and Pearson's correlation were used to analyze the data (George & Mallery, 2019). Diagnostic tests for heteroscedasticity and normality ensured the robustness of the findings (Hernandez, 2021). The study utilized a panel linear regression model with a p<0.05.

Panel linear Regression model with the moderating variable took the form;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 M + \varepsilon$$

Where, β_0 =Constant β_1 ,= are regression coefficients corresponding to the independent variables, X_1 = independent variable digital organizational innovations M= moderating variable; government policy ε = is the error term.

4.0 Results and Discussion

The study targeted a sample size of 315 employees from 39 commercial banks in Kenya, out of which 260 questionnaires were returned. This represented a response rate of 82.5%, which was considered adequate for survey research as recommended by Morton et al. (2019).

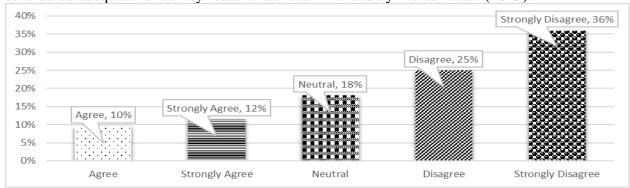


Figure 2: Organization Innovation on Financial Performance of Commercial Banks

The outputted responses on the statement "uptake of digital organizational innovations has no significant influence on the performance of commercial banks in Kenya" showed that those who disagreed and strongly disagreed were 35.7% and 25%, respectively; those who were neutral were 18%, while those who agreed and strongly agreed were 11.5% and 9.6%, respectively. The study thus established that the majority of the respondents disagreed with the statement, meaning that the uptake of digital organizational innovations has a great and significant influence on the performance of commercial banks in Kenya.

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Table 1: Knowledge Transfer

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	42	16.2	16.2	16.2
No	76	29.2	29.2	45.4
Not aware	142	54.6	54.6	100
Total	260	100	100	

Outcome of the respondent's awareness of any knowledge transfer between their banks; 54.6% of the respondents indicated that they were not aware, 29.2 percent said no, and 16.2% said yes. This outcome reveals majority of the workforce was not aware of any knowledge transfer, implying that commercial banks rarely share knowledge or transfer knowledge from one bank.

Table 2: Organization opportunities in Knowledge Management

<u></u>	11		<u> </u>	
Category	Frequency	Percent	Valid Percent	Cumulative Percent
Promotes Learning and	70	26.9	26.9	26.9
Development				
Empowering Employees	55	21.2	21.2	48.1
Positive Work Culture	65	25.0	25.0	73.1
Ignite Innovative Thinking	70	26.9	26.9	100.0
Total	260	100.0	100.0	

Promoting Learning and Development at 26.9% indicates that knowledge sharing instills and promotes learning and development within the bank. This can improve employee skills and expertise. Empowering employees (21.2%) suggests that knowledge sharing can lead to a more capable workforce. Employees who feel trusted with knowledge are more likely to take ownership and make better decisions. Positive Work Culture (25.0%) indicates that knowledge sharing can create a more collaborative and positive work environment. This can lead to increased employee satisfaction and productivity. Ignite Innovative Thinking (26.9%) highlights that sharing knowledge can spark new ideas and innovation. By sharing diverse perspectives, employees can come up with creative solutions to problems.

Table 3: Effects of change on Organizational Innovation

		Std.	
Statement	Mean	Deviation	N
Change management is communicated effectively with the organization	3.46	1.445	260
There is mutual relationship among the workers which enhances communication in the organization	2.57	1.389	260
Failures in the organization have led to failures in implementation of organization innovation or lack of it	3.43	1.378	260
There is adequate training to enable employees cope with changes in management	2.45	1.324	260
Average Score	2.11	1.384	

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The outputted results on effectiveness of changes communication within the organization were: very great extent 31.5%, great extent 26.9%, not at all 15.8%, moderate extent 13.1%, and little extent 12.7%, There is adequate training to enable employees to cope with changes in management at 2.45 and Stdv = 1.324. This study found that there is a mutual relationship among the workers that enhances communication in the organization at a mean of 2.57, also on whether there is adequate training to enable employees to cope with changes in management at a mean of 2.45. This implies that respondents' opinions vary significantly regarding these statements. For example, while the mean score for the first statement is 3.46, indicating moderate agreement, the standard deviation suggests that some respondents strongly agree while others strongly disagree.

Table 4: Embracing re-engineering initiatives

		Std.	
Statement	Mean	Deviation	N
Employees resist the implementation of change within the institution.	3.32	1.377	260
Employees tend to refuse new responsibilities brought about by changes in management.	2.43	1.306	260
Poor organizational structure causes resistance among some employees.	2.56	1.420	260
There is adequate training to enable employees to cope with change in the organization.	2.65	1.245	260
Average	2.74	1.337	

The data shown above indicated that the mean score of the statement ranged from employee resistance to the implementation of change within the institution (mean = 3.32 to 2.43) to employee tendencies to refuse new responsibilities brought about by change in management. The study established that most employees resist change, which consequently affects the implementation of digital organizational innovations. Overall, the data highlights the multifaceted nature of the challenges associated with implementing organizational innovation within banks.

Moderating Effect of Government Policies on Financial Performance of Commercial Banks
Table 5: Item Statistics on Government Policies

Category	Mean	Std. Deviation	N
Return on Equity(Dependent Variable)	2.59	1.474	260
Tax and Levies	2.73	1.319	260
Cyber Crime Act 2018	2.59	1.345	260
Data Protection Act 2019	2.81	1.341	260
CBK Act 2015	2.46	1.301	260
Average Score	2.636	1.356	

Table above shows the moderating effect of government policies on the dependent variable return on equity. The mean score ranged from 2.46 for the for the CBK Act 2015 and (b) the

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Cyber Crime Act 2018 to a mean score of 2.81, which touched on the Data Protection Act 2019. In the case of the Data Protection Act 2019 with a mean score of 2.81, the majority of respondents strongly agreed at 60% and disagreed at 20% that the policy had a moderating effect on return to equity, while the same happened to the Banking Act 2015, which had 60% strongly agreeing and 30% disagreeing that the policy had a moderating effect on return to equity, which was the dependent variable in this study.

Performance of Commercial Banks Return on Equity

The study sought to find out whether commercial banks had improved their performance in terms of profitability in relation to innovations or the uptake of digital innovation in the last 5 years. The majority of the respondents said that they disagreed at 32%, and the majority agreed or strongly agreed at 59%, while those who were neutral were at 10%. Secondary data analysis of the profitability of banks between 2018 and 2022 showed that the overall average ROE across all banks for the given years stands at 10%, reflecting the sector's profitability and efficiency during this period. This measure demonstrates how effectively banks are utilizing shareholders' equity. Notably, some banks exhibit a higher average ROE, indicating superior profitability and efficient equity usage, while others show lower figures. This study therefore established that many were in agreement that, due to the uptake of innovation, there was high performance by the commercial banks but not to the desired levels, since most of the innovations have challenges in use and application. For bank managers, this data underscores the importance of embracing and investing in innovative strategies, particularly those related to digital transformation, as a means to enhance the financial performance and competitiveness of their institutions. It suggests that banks that effectively leverage innovations are more likely to achieve improved profitability and ROE compared to those that do not prioritize innovation initiatives.

Regression Analysis

Regression model results on Uptake of Digital Organizational Innovation to Performance of Commercial Banks

Table below show the regression coefficient of Organizational innovation and is effect on the performance of commercial bank.

Table 1: Regression Coefficient of Organizational Innovation

Unstandardized Standardized Coefficients Coefficients					95.0% Confidence Interval for B Correlations							rity ics
		Std.				Lower	Upper	Zero-				
Model	В	Error	Beta	t	Sig.	Bound	Bound	order	Partial	Part	Tolerance	VIF
(Constant)	.409	.055		7.435	.000	.301	.517					
organization	.809	.028	.873	28.683	.000	.754	.865	.873	.873	.873	1.000	1.000

a. Dependent Variable: ROE

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Table 7: Model Summary of Organizational Innovation

				Std. Error		Chan	ge Stat	istics		
		R	Adjusted	of the	R Square	F			Sig. F	Durbin-
Model	R	Square	R Square	Estimate	Change	Change	df1	df2	Change	Watson
	.873ª	.761	.760	.41886	.761	822.691	1	258	.000	.401

a. Predictors: (Constant), organization

b. Dependent Variable: ROE

Table 2: Hypothesis Testing on Organizational Innovations

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	144.336	1	144.336	822.691	.000b
	Residual	45.264	258	.175		
	Total	189.600	259			

a. Dependent Variable: ROE

b. Predictors: (Constant), organization

Table 6 presents the results of a regression analysis where the dependent variable is "Return on Equity" (ROE) and the independent variable is "Organizational Innovations. The p value indicates that organizational innovation significantly and positively influences returns on equity. Specifically, on average, for every unit increase in organizational innovations the return on equity is predicted to rise by 0.873. The standardized coefficient (Beta = 0.873) suggests that marketing innovations are predictor of return on equity. The predicted model coefficient for organisational innovation took the form:

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

$$Y = 0.409 + 0.873X_1 + \varepsilon$$

Table 7 shows that 0.761(76%) variation in organizational innovation causes variations in returns in equity. Table 8 above shows a one-way ANOVA, which shows that regression on organizational innovations is significant for use in the study. With Sig.0001 is < F-Value 822.691 which means that the hypothesis is rejected. Therefore, organizational innovation has a positive and significant influence on the performance of commercial banks.

Regression on Moderating Effect of Government Policies to Financial Performance of Commercial Banks

Table 9 below shows the regression coefficient of moderating effect of government Policies and its effect on the performance of commercial bank.

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Table 9: Regression Coefficient of Moderating Effect of Government Policies

	Unstandardize d Coefficients		Standardize d Coefficients		95.0% Confidence Interval for B Correlations					Collinearity Statistics		
						Lowe r	Uppe r	Zero				
		Std.				Boun	Boun	_	Partia	Par	Toleranc	
Model	В	Error	Beta	t	Sig.	d	d	r	l	t	e	VIF
(Constant)	.394	.059		6.620	.00	.277	.511					
Governmen t	.795	.030	.857	26.66 1	.00 0	.736	.854	.857	.857	.857	1.000	1.00

a. Dependent Variable: ROE

Table 3: Model Summary of Moderating Effect of Government Policies

				Std. Change Statist						
			Adjusted	Error of	R					
		R	R	the	Square	\mathbf{F}			Sig. F	Durbin-
Model	R	Square	Square	Estimate	Change	Change	df1	df2	Change	Watson
	.857a	.734	.733	.44239	.734	710.789	1	258	.000	.571

a. Predictors: (Constant), Government

Table 4: Hypothesis Test on Moderating Effect of Government Policies

	ANOVA											
	Sum of											
Model	Squares	df	Mean Square	${f F}$	Sig.							
Regression	139.107	1	139.107	710.789	.000b							
Residual	50.493	258	.196									
Total	189.600	259										

a. Dependent Variable: ROE

Table 9 presents the results of a regression analysis where the dependent variable is "Return on Equity" (ROE) and the moderating effect of government policy. The p value indicates that moderating effect of government policy significantly and positively influences returns on equity. Specifically, on average, for every unit increase in the moderating effect of government policy, the return on equity is predicted to rise by 0.857. The standardized coefficient (Beta = 0.857) suggests that moderating effect of government policy are predictors of return on equity. As a result, bank management should pay attention to government policies and regulations, since they can have a significant influence on the bank's return on equity. Understanding and perhaps utilizing these rules might result in improved financial performance. This research sheds light on

b. Dependent Variable: ROE

b. Predictors: (Constant), Government

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the significance of government policy as a driver of bank profitability. The predicted model coefficient was predicted in the form:

$$Y = \beta_0 + \beta_1 M + \varepsilon ,$$

$$Y = 0.394 + 0.857M + \varepsilon$$

Table 10 shows that 0.734(73%) variation in moderating effect of government policies causes variations in returns in equity. Table 11 shows that the regression on moderating effect of government policy is significant with Sig.0001 is < F-Value 710.789 which means that the hypothesis is rejected. Therefore, moderating effect of government policy has a positive and significant influence on the financial performance of commercial banks.

4.0 Conclusions

The result revealed that 60.8% of the respondents agreed that digital organizational innovations have a significant influence on performance of commercial banks in Kenya. The research also demonstrated that 54.6% of the respondents were not aware of any knowledge transfers or sharing between banks and other organizations. The study further evinced that organizational innovation exhibit positive and significant influence on ROE (B = 0.873, P<0.0001). Organizational innovation encompasses various facets, like knowledge transfer and learning. It can be concluded that majority of commercial banks were not into knowledge sharing, which harness the full potential of employee capabilities and satisfaction, perceived potential benefits of knowledge sharing should supersede the fear of imitation. Banks are able to experience increased employee productivity and satisfaction, improved customer experience, increased innovation capabilities and overall profitability compared to fear of imitation, which can be countered through enacting safety measures such as copyrights and patents. There is need for banks to prioritize organizational restructuring, employee training and change management in order to flatten hierarchies, decentralize decision-making and empower employees to achieve superior performance. Most commercial banks are reluctant to fully re-engineer internal processes within the organization in matters of organizational culture, structure, employee training and communicating change. In turn, this may compromise on quality, speed, and service delivery, eventually increasing costs and negatively impacting the financial performance of commercial Banks.

5.0 Conclusions

The result revealed that 60.8% of the respondents agreed that digital organizational innovations have a significant influence on performance of commercial banks in Kenya. The research also demonstrated that 54.6% of the respondents were not aware of any knowledge transfers or sharing between banks and other organizations. The study further evinced that organizational innovation exhibit positive and significant influence on ROE (B = 0.873, P<0.0001). Organizational innovation encompasses various facets, like knowledge transfer and learning. It can be concluded that majority of commercial banks were not into knowledge sharing, which harness the full potential of employee capabilities and satisfaction, perceived potential benefits of knowledge sharing should supersede the fear of imitation. Banks are able to experience increased employee productivity and satisfaction, improved customer experience, increased

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innovation capabilities and overall profitability compared to fear of imitation, which can be countered through enacting safety measures such as copyrights and patents. There is need for banks to prioritize organizational restructuring, employee training and change management in order to flatten hierarchies, decentralize decision-making and empower employees to achieve superior performance. Most commercial banks are reluctant to fully re-engineer internal processes within the organization in matters of organizational culture, structure, employee training and communicating change. In turn, this may compromise on quality, speed, and service delivery, eventually increasing costs and negatively impacting the financial performance of commercial Banks.

6.0 Recommendations

The study recommends organizational re-engineering in areas organizational structure, culture, and change management. There is need for banks to forge strategic partnerships with fintech start-ups, technological firms and other industry stakeholders to accelerate digital innovations. This allows banks to leverage on external expertise, access innovative technologies and explore new business models. culture of innovation can be fostered through experimentation, collaboration and continuous learning. Re-engineering of organizational structure can enhance leadership development and foster a culture of experimentation and learning. This will in turn reduce instances of resistance to change and greatly improve performance of commercial banks, which will subsequently lead to increased ROE

On the moderating effect of government policies on the performance of commercial banks, evidence adduced shows that the hypothesis was rejected, concluding that government policies (Tax and levies, CBK Act 2015, Cyber Crime Act 2018 and Data Protection Act 2019) have a positive correlation and significantly influence performance of commercial banks. This situation explains why government policy has a positive correlation between the independent variable and performance of commercial banks in Kenya. Despite potential benefits, commercial banks face challenges around regulatory compliance, data security concerns, legal system integration and resource constraints. Supportive regulations help banks navigate the complexities of digital transformations successfully to realize the full potential of digital innovations. Multifaceted government policies and regulatory constraints around Cyber security risks and Data privacy concerns limits the banks' ability to meet evolving expectations of their tech-savvy clientele who are always vulnerable to fraud. They to a great extent hamper seamless uptake of organizational innovations hence the insignificance to ROE. The study recommends that data must be welldefined, structured and organized to be useful for analysis and decision making. Commercial banks can leverage application of Big Data and Data analytics, Biometric technology and cloud computing to enhance customer data protection as a regulatory requirement. These policies should not be a hindrance to innovations but a catalyst of encouraging more digital innovation in banking space. Future research should continue to monitor the impact of evolving government policies on the banking sector and explore strategies in enhancing regulatory effectiveness, improving ROE and strengthening assumption of digital innovations.

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References

- Abdo, S., & Edgar, D. (2021). Facing the challenges of Covid-19 in the Egyptian banking sector: the role of bricoleurs in achieving organizational innovations via learning through improvisation. *Journal of Social Economics Research*, 8(2), 77-95.
- Adner, R., & Zem sky, P. (2016). Diversification and performance: Linking Relatedness, market structure, and the decision to diversify. *Journal of Strategy Science*, 1(1), 32-55.
- Aluko, O., and Ajayi, M. (2018). "Determinants of banking sector development: Evidence from Sub-Saharan African countries", *Borsa Istanbul Review*, 18(2): 122-139.
- Amidjaya, P.G., and Widagdo, A.K. (2020). "Sustainability reporting in Indonesian listed banks: Do corporate governance, ownership structure and digital banking matter?". *Journal of Applied Accounting Research*, 21 (2),231-247.
- Annarelli, A., & Nonino, F. (2016). Strategic and Operational Management of Organizational Resilience: Current state of research and future directions. Omega, 62, 1-18.
- Awino, Z. B., Muteshi, D. C., Kitiabi, R. K., & Pokhariyal, G. P. (2018). Firm level strategy, organization culture and performance of food and beverage manufacturing firms in Kenya. *International Journal of Business and Management*, 13(8), 224.
- Cai, S., Zhou, J., & Pan, J. (2021). Estimating the sample mean and standard deviation from order statistics and sample size in meta-analysis. *Statistical methods in medical research*, 30(12), 2701-2719.
- Central Bank of Kenya. (2022). *Banking sector innovation survey*, Central Bank of Kenya, Nairobi reports.
- Coetzee, J. (2018). Strategic implications of Fintech on South African retail banks. *South African Journal of Economic and Management Sciences*. 52(4), 143-178.
- Creswell, J. W., and Poth, J. (2015). *A concise introduction to mixed methods research*. Thousand Oaks, CA: Sage.
- Fasano, F., & La Rocca, M. (2021). National versus Local Banking Development. Who is the Winner? A European Study of Moderation Effect. In *EFMA 2021 European Conference*.
- Financial Stability Board. (2019). Fintech and market structure in financial services: Market developments and potential financial stability implications. *Financial Stability Board* (FSB)
- George, D., & Mallery, P. (2019). *IBM SPSS statistics 26 step by step: A simple guide and reference*. Routledge.
- GSMA (2019). "The State of Mobile Internet Connectivity 2019" digital development" https://www.gsma.com/publicpolicy/resources/mobile-taxation-in-kenya-accelerating-digital development
- Hernandez, H. (2021). Testing for normality: What is the best method. *ForsChem Research Reports*, 6, 2021-05.
- Hoxha, S., & Kleinknecht, A. (2020). When labour market rigidities are useful for innovation. Evidence from German IAB firm-level data. *Research Policy*, 49(7), 104066.
- Kesmodel, U. S. (2018). Cross-sectional studies—what are they good for? *Acta obstetricia et gynecologica Scandinavica*, 97(4), 388-393.

Vol. 8, No.07; 2024

ISSN: 2456-7760

- Klus, M. F., Lohwasser, T. S., Holotiuk, F., & Moormann, J. (2019). Strategic alliances between banks and fintechs for digital innovation: Motives to collaborate and types of interaction. *The Journal of Entrepreneurial Finance (JEF)*, 21(1), 1-23.
- Kohli, R., & Melville, N. P. (2019). Digital innovation: A review and synthesis. *Information Systems Journal*, 29(1), 200-223.
- Korableva, O. L. G. A., & Kalimullina, O. L. G. A. (2016). An innovative approach to strategic risk management in banking: Russian banks case study. WSEAS Transactions on Business and Economics, 13(25), 269-82.
- Ky., Rugemintwari., & Sauviat, (2019). Is Fintech good for bank performance? The case of mobile money in the East African Community. *LAPRe Bank Seminars*
- McGaghie, W. C.; Bordage, G.; & Shea, J.A. (2015). Problem Statement, Conceptual Framework, and Research Question. Oxford: Blackwell Publishing Ltd.
- Misati, R.N., Kamau, A., & Nassir, H. (2019). Do migrant remittances matter for financial development in Kenya? *International Academic Journal of Economics and Finance*, 5(3) 50-62.
- Mwai, A., Njeru, A., & Memba, F. (2019). Moderating effect of bank size on relationship between financial innovations adoption and financial deepening of listed commercial bank in Kenya. *American Based Research Journal*, 8(11). https://ssrn.com/abstract=3585704
- Ndungu, J. G., & Muturi, W. (2019). Effect of diversification on financial performance of commercial banks in Kenya. *International journal of current aspects*, 3(5), 267-285.
- OECD (2005), Handbook on Economic Globalisation Indicators, OECD, Paris.
- Rao, M. V. (2021). A study on emerging trends of e-banking in India. *International Journal of Management IT and Engineering*, 11(1), 68-80.
- Rehman, T. (2021). Cybersecurity for E-Banking and E-Commerce in Pakistan: Emerging Digital Challenges and Opportunities. Handbook of Research on Advancing Cybersecurity for Digital Transformation, 163-180
- Roseline, M., Jarred, O., & Maureen, O. (2021). Does financial innovation enhance financial deepening and growth in Kenya? *International Academic Journal of Economics and Finance*, 5(2) 30-41.
- Saviotti, P. P., & Metcalfe, J. S. (2018). Évolutionary theories of economic and technological change: present status and future prospects. HAL Post-Print, (hal-02097467).
- Schulz-Knappe, C., Koch, T., & Beckert, J. (2019). The importance of communicating change: Identifying predictors for support and resistance toward organizational change processes. Corporate Communications: *An International Journal*, 24(4), 670-685.
- Schumpeter, J. A., & Swedberg, R. (2021). The theory of economic development. Routledge.
- Shahul Hameed, N. S., Salamzadeh, Y., Abdul Rahim, N. F., & Salamzadeh, A. (2022). The impact of business process reengineering on organizational performance during the coronavirus pandemic: moderating role of strategic thinking. *Foresight*, 24(5), 637-655.
- Shrestha, N. (2020). Detecting multicollinearity in regression analysis. *American Journal of Applied Mathematics and Statistics*, 8(2), 39-42.
- Shrikant I. Bangdiwala (2019) Basic epidemiology research designs I: cross-sectional design, *International Journal of Injury Control and Safety Promotion*, 26(1), 124-126.

Vol. 8, No.07; 2024

ISSN: 2456-7760

- Sipos, G. L., & Ionescu, A. (2018). The Innovation-Corporate Performance Relationship in Emergent Countries. *Procedia-Social and Behavioral Sciences*, 238, 124-132.
- Soewarno, N. & Tjahjadi, B. (2020). Measures that matter: an empirical investigation of intellectual capital and financial performance of banking firms in Indonesia. *Journal of Intellectual Capital*, 21(6), 1085-1106.
- Teece, D. J. (2016). Dynamic capabilities and entrepreneurial management in large organizations: Toward a theory of the (entrepreneurial) firm. *European Economic Review*, 86, 202-216.
- Teece, D. J. Pisano, G. & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), 509-533.
- Wang, Y., Hong, A., Li, X., & Gao, J. (2020). Marketing innovations during a global crisis: A study of China firms' response to COVID-19. *Journal of business research*, 116, 214-220.