
Evaluating the Effect of Reconfiguring Capability on the Performance of Commercial Banks in Kenya

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Abstract

The performance of the financial services sector, particularly that of commercial banks, is crucial for the economic vitality of any country. The performance of commercial banks in Kenya appears erratic while the banks continue to face turbulent operating environments. This study evaluated the effect of reconfiguring capability on the performance of commercial banks in Kenya. The study used a cross-sectional descriptive research design and targeting 228 managers from 38 licensed commercial banks in Kenya. Primary data was collected using a structured self-administered questionnaire. The questionnaire was evaluated for internal consistency using Cronbach alpha coefficient and for construct validity using Kaiser-Meyer Olkin Coefficient from the Confirmatory Factor Analysis. The weighted data from 38 commercial banks was tested for multivariate Gaussian distribution, collinearity, pairwise linearity, outliers and autocorrelation. Ordinary Least Squares was used for testing the hypotheses. The study found that 33.8% of the variations in commercial banks performance was accounted by reconfiguring capability practices and that there was a statistically significant effect of these practices on the performance of commercial banks in Kenya. The study recommends innovativeness approaches to institutional flexibility, resources mapping and reallocations as well as business network management for sustained performance of the commercial banks in the lagging strategic performance metrics.

Keywords: Commercial Banks; Reconfiguring Capability; Dynamic Capabilities; Firm Performance; Banking Sector; Kenya.

1. Introduction

1.1 Background of the Study

Commercial Banks are instrumental in fostering a nation's economic well-being, not only by collecting deposits but also by directing those funds toward the most economically productive sectors of the economy. In Kenya, the banking institutions provide domestic credit to both the National and County Governments, private sector as well as financial and nonfinancial

corporations whose value stood at an estimated Kes 6.2 trillion in the year 2022 (KNBS, 2023). The financial sector contributed approximately six percent (6%) to GDP in Kenya. Globally, a performing banking sector is critical to achieving some of the most important Sustainable Development Goals (SDGs) such as industry, goal 9 - innovation, and infrastructure; goal 8 - decent work and economic growth; goal 10 - reduced inequality; and goal 11 - sustainable cities and communities. The banking sector in Kenya provides employment to approximately 36,000 Kenyans directly at managerial level (11,000), supervisory level (8,000), clerical level (13,000) and secretarial and other staff category (4000) (Central Bank of Kenya, 2022).

Performance of commercial banks and typically any other corporate entities during challenging times can be enhanced by the cultivation of dynamic skills. Organizations with a higher degree of expertise and competency are better equipped to mitigate adversities by leveraging on their dynamic capabilities. These specialized abilities not only facilitate more efficient development of new processes but also enable organizations to better allocate their resources and adapt to the shifting environmental contexts (Dejardin et al., 2022). To remain agile and proactive, organizations should consistently identify and capitalize on opportunities while also undergoing periodic transformations in their structure and culture. This allows them to better respond to emerging threats and opportunities (Teece, 2019). The efficacy of a firm's dynamic capabilities significantly affects how rapidly and meticulously it can align its resources, including its business models, to meet evolving customer needs and expectations. Dynamic capabilities allow businesses to locate profitable combinations of assets and competences. Ordinary skills provide for the recognition of significant process breakthroughs, while dynamic capabilities aid in the discovery of new goods and services, potentially opening up markets in which competitors have not yet established themselves (Schoemaker et al., 2018). Therefore, the financial viability and longevity of commercial banks are crucial to the prosperity of any economy. Kenya envisions to achieve an average of at least 10% economic growth rate by the years 2030 and beyond. This targeted economic growth is achievable in a stable and financially performing banking sector which will provide stable payment systems to support social, political and economic sectors. The study sought to unravel the interplay and effect of reconfiguring capability on performance of commercial banks in Kenya.

1.2 The Problem Statement

Performance of the banking sector in an economy is a dependable indicator of the economic prospects of that nation. The financial sector is essential to Kenya's economy, accounting for more than 5% of the country's GDP according to Kenya National Bureau of Statistics (KNBS). The financial industry is identified as a critical cornerstone for realizing Kenya's Vision 2030 strategic blueprint. Banks operate in a very dynamic and competitive business environments. This dynamism border on frequent changes in technology, customer tastes, changes in regulation, risk exposures and talent retention. While this continues to destabilize the sector, a KPMG survey point that, commercial banking sector will suffer the most disruptive changes and turbulence in the near future. This turbulence will be as a result of technology changes; digital assets and crypto services; rise in cyber risk and compliance exposures as well as increasing digitization of processes which will continue to hamper the performance of banks. This survey

indicated that a paltry 26% of the senior executives were confident of possible growth on their banks. Despite the general conception that banks in Kenya are highly performing in terms of profitability, the banks' performance in other performance metrics continue to be erratic. For instance, in the period (2018-2022), the measures of staff efficiency score, a ratio of the number of deposit account holders to number of staff, indicates a diminishing change of 12.24%, 12.89%, 13.03%, -7.55%) and -13.25% respectively. Further, as at December 2022, statistics indicated that 15 out of the 38 (38.46%) banks were not offering products of different tenor, implying that two out of every five commercial banks were struggling with the Central Bank directive (Central Bank of Kenya, 2022). Previously many scholars, Protogerou et al. (2012), Zhou et al. (2017), Pichlak (2021) Ogunkoya et al. (2014), Nyachanchu et al. (2017), Odwaro et al. (2022), Ogunkoya et al. (2014), Ali and Wambua (2021) have examined the concept of dynamic capabilities and performance with the intention of providing solutions to the problem of performance not only among banks but also other economic sectors. Most studies done on the concept of dynamic capabilities and performance exhibit contextual gaps, methodological gaps and analytical gaps considering they were using the same methodologies despite the context, some in developed and emerging economies. The problem of dealing with volatile, dynamic and ever-changing business environment constantly affecting organizational performance has remained a dominant topic both in industry and academia. This study sets out to offer an empirical foundation for developing interventions to improve the commercial banks' performance and inform strategic reconfiguring practices informing sustained performance.

1.3 Literature Review

1.3.1 Dynamic Capability Theory

According to Teece and Pisano (1994), capabilities of a firm are rooted in processes, positions, and developmental paths. These capabilities can only yield competitive advantages and generate value if they are composed of a unique blend of routines, skills, and complementary assets that are challenging to duplicate. The dynamic capabilities theory originated as both a continuation and a critique of the resource-based paradigm and holds that firms must constantly modify their resources in order to remain competitive in an ever-changing market environment (Madhani, 2010). As such, it focusses on the methods by which enterprises can adapt, integrate, and rearrange their resources to navigate quickly changing external situations (Teece, Pisano, & Shuen, 1997). While the dynamic capability theory appears, an all fit for the study, it suffers three major shortcomings. First, it does not bring into view that actually, dynamic capabilities are themselves a function of other inbuilt capabilities associated with entity's resource endowment. Secondly, it does not explicitly identify what knowledge might enhance the entity's ability to employ dynamic capability better in order to reap full economic benefits as described by knowledge-based view theory. Finally, while the theory identifies the three capabilities (sensing capability, seizing capability and reconfiguring capability), it does not prescribe the respective practices to institutionalize the capabilities. Nevertheless, dynamic capabilities framework is a useful for identifying certain practices to respond and anchor sustained performance amidst turbulent external business environment. The findings of this study contribute to the existing

literature by testing if reconfiguring capability practices as a subset of dynamic capability could inform sustained performance of commercial banks in Kenya.

1.3.2 Empirical Literature

Newbert, Gopalakrishnan & Kirchhoff, (2008) discovered that the feature of reconfiguration within dynamic capacities received the least attention in empirical investigations. Arend and Bromiley (2009) evaluated the reconfiguration capabilities perspective's potential to provide a cohesive account for organizational transformation, identifying a lack of scientific consistency, conceptual simplicity, and empirical depth. Their study identified four major difficulties that limit the dynamic capabilities research domain's contribution to strategy and management. Giudici and Reinmoeller (2012) thoroughly critiqued the dynamic capabilities framework, analyzing 104 publications from diverse journals and fields in which the concept of dynamic capabilities was prominent. Through an examination of inter-article citations, they urged for a more focused investigation on dynamic capacities, opposing its dismissal and emphasizing the construct's need for more specific and targeted research. Pichlak (2021) discovered that reconfiguring resources serves as a mediator between human resources and the firms' economic performance. Tempelmayr et al. (2019) underline the importance of reconfiguration in improving organizational performance, particularly in servitization environments, which is confirmed by Nyachanchu et al. (2017), who associate firm success with reconfiguration capacities. Zohourian et al. (2022) show that dynamic marketing skills, notably in Iranian food industries, are critical for upgrading and reconfiguring marketing processes, resulting in increased organizational performance.

Schilke (2014) shown that the efficiency of a firm's reconfiguration capabilities in increasing performance is heavily influenced by the dynamics of the external environment. Earlier studies proposed that enterprises within the same sector might capitalize on opportunities, acquire competitive advantages improve operational efficiency by exploiting their dynamic skills to respond to changes in the external landscape (North & Varvakis, 2016; Zollo et al., 2016). However, the impact of reconfiguration can vary from one entity to another. Garrido et al. (2019) found out a negative relationship between reconfiguration capabilities and organizational performance. Furthermore, Markovich et al. (2021) caution that in stable markets, investments in reconfiguration may not yield performance benefits, and might even lead to resource losses and hence it can be negatively correlated with an entity's performance. This literature advances that reconfiguring capabilities have a positive and statistically significant effect on performance of commercial Banks in Kenya.

1.4 Research Hypothesis

This study tested the hypothesis that H_01 : Reconfiguring capability does not have a statistically significant effect on performance of commercial banks in Kenya.

1.5 Conceptual Framework of the Study

Reconfiguring capability was conceptualized for commercial banks performance in Kenya.

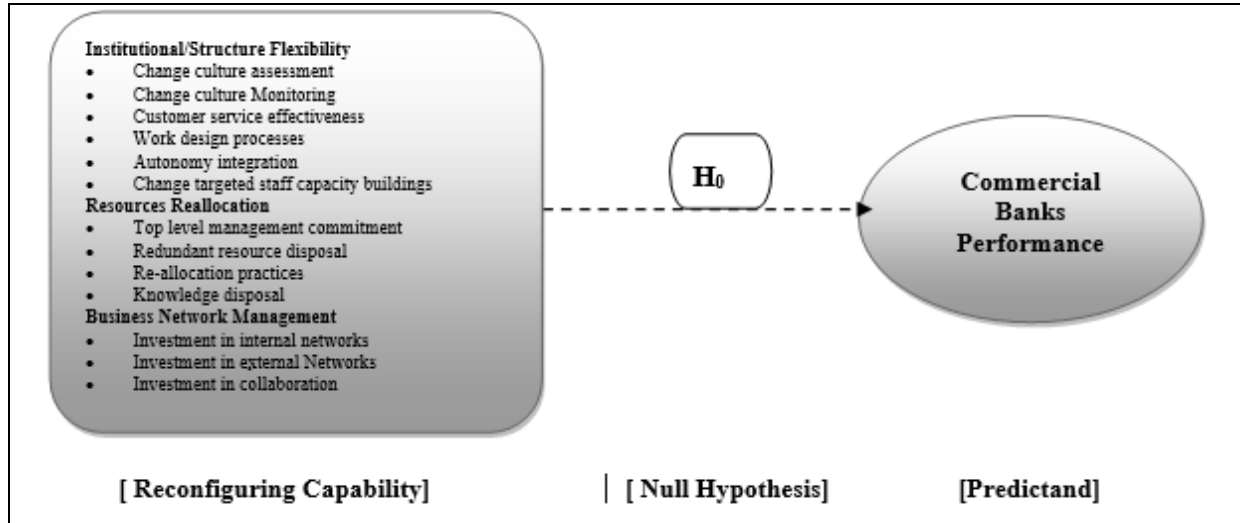


Figure 1: Conceptual Framework for Reconfiguring Capability and Performance among Commercial Banks in Kenya

2. Method

2.1 Data Collection, Analysis and Presentation

The unit of response was six managers from internal audit, finance, risk and compliance, operations, retail banking and corporate banking from each of the commercial banks. The target population in this study consisted of the 38 commercial banks in Kenya, licensed by the Central Bank of Kenya at December 2023. A census approach was taken in this study. Primary data (for the reconfiguring capability) and for the performance measures (learning and growth, internal business processes and customer perspective) was collected using a semi- structured questionnaire, using a drop and pick method. Instrumentation of primary data was based a five-point Likert scale with the equivalences of strongly disagree (1) on one side with a scale, disagree (2), neutral (3), agree (4) and strongly agree (5) on the other side of the scale (Sekar & Anandakumar 2011). A data collection sheet was used to summarize secondary data for commercial banks performance (financial measures). The study utilized the Statistical Package for Social Sciences (SPSS) version 26 and Python Software to analyze the response rate, descriptive analysis, tests of regression assumptions and finally the inferential analysis.

2.2 Reliability and Validity of Data Collection Instrument

The fourteen (14) parameters used to measure reconfiguring capability produced a Cronbach coefficient of 0.800 while the twelve (12) measures for performance generated a coefficient of 0.748 and the results are presented in Table 1. Confirmatory Factor Analysis (CFA) was used to

analyze the numerical construct validity. Kaiser-Meyer-Olkin (KMO) coefficient of 0.718, Chi-Square of 3386.034 and associated p-value of .000 was generated for the reconfiguring capability and a KMO of 0.671, Chi-Square of 619.596 and an associated p-value of .000 for performance measures. Confirmatory Factor Analysis' varimax rotation generated three components for reconfiguring capability with cumulative rotations sums of 75.102%. On the other hand, measures of performance achieved cumulative rotations sums of squared loadings of 60.540%.

Table 1: Internal Consistency and Numerical Construct Validity Test Output

Variable	Number of Measures	KMO	Chi-Square & p-value	p-value	Rotations Sums of Squared Loadings (%)	Number of Components	Factor Loadings Range
Reconfiguring Capability	14	0.748	3386.934	0.000	75.102	3	0.952 - 0.773
Performance	12	0.718	619.596	0.000	60.540	2	0.943- 0.575

2.3 Data Analysis and Presentation of Results

The means and standard deviations of the reconfiguring capability and commercial banks performance, test of regression assumptions and simple linear regression was carried out. Reconfiguring capability and performance achieved a mean of 3.50 and standard deviations of 1.282 for the reconfiguring capability and 3.355 (mean) and 1.295(standard deviation) for the case of performance measures. Hypothesis testing was done using simple OLS linear model variate. OLS were extracted and interpreted. The equation used in this study was in the form; $Perf = \alpha + \beta_1 X_1 + \epsilon$; where (β_1) reconfiguring capability (independent variable) and Perf is of commercial banks (dependent variable). This equation is supported by Montgomery, Peck & Vining, 2001; Garson, 2012; Argyrous, 2011).

2.4 Research Design

This study adopted a cross-sectional approach within a descriptive research framework considering that dynamic capabilities often tend to grow over fairly short time periods, such as five years. Descriptive studies are especially appropriate for initial inquiries and cross-sectional analyses, enabling the gathering, summary, presentation, and analysis of data to highlight certain elements (Zikmund, Babin, Carr & Griffin, 2010; Jongbo, 2014; Asenahabi, 2019; Chege & Otieno, 2020).

3. Results

3.1 Response Rate

This study targeted 228 respondents from 38 commercial banks distributed by bank Tier (s) as; 9 Tier one commercial banks, 9 Tier two commercial banks and 20 Tier three commercial banks, all operating in Kenya as at 31st December 2023. Fifty-four questionnaires were distributed to

Tier one, 54 questionnaires to Tier two and 120 questionnaires to Tier three. As such, the study distributed two hundred and twenty-eight (228) questionnaires, six to each of the licensed commercial banks in Kenya. Out of the 228 questionnaires distributed, 210 were properly filled and returned, giving a response rate of 92.11%. This response rate was deemed as adequate for this study (Charandrakandan, Venkatapirabu, Sekar & Anandakumar, 2011).

3.2 Test of Linear Regression Analysis Assumptions

Miles and Shevlin (2010), Chatterjee & Simonoff (2013) view that before testing of study hypothesis for ratio-scaled data, it is necessary to carry out tests of statistical assumptions Test of Gaussian distribution, test of independence and test of linearity were carried out.

3.2.1 Test of Gaussian Distribution for Performance

The twelve primary data measures and the four secondary data measures for performance were weighted and subjected to a Q-Q plot using Python. The null hypothesis that, the data is not normally distributed was tested. The test statistics generated for Kolmogorov-Smirnov statistics was 0.0795 with an associated p-value of 0.9543. The conclusion of these two values was that the null hypothesis was rejected and thus also upheld that the data for commercial banks performance was normally distributed

3.2.2 Test of Homoscedasticity and Test of Outliers

This test of outlier for the study reconfiguring capability and performance of commercial banks was carried out using residual probability -probability plots. The output is presented in Figure 2 below. The statistics associated with reconfiguring capability (9.85E-15, 0.986) imply that the model residuals were fairly homoscedastic and hence the regression model chosen (bivariate linear regression) was appropriate to the data. The test of outliers was carried out using violin plot. The violin plot for reconfiguring capability is presented in Figure2.

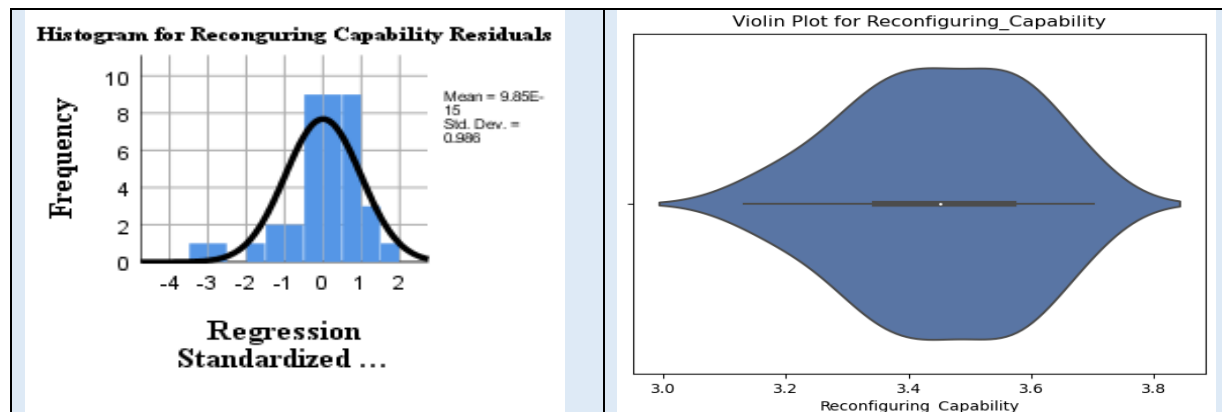


Figure 2: Model Residual Histograms and Violin Plot for Reconfiguring Capability

The violin plot for reconfiguring capability shows that there was an elevated/ high-density distribution of values around the mean values (represented by the white dot corresponding with

the modal values of the respective variable). It can also be observed that there were no significant cases of outliers as the black bar of the violin plot appear to have a proportionate subdivision within it and none is overly plotted toward either end of the violin plot. The mutation of the interquartile range shows that the median was also not significantly affected by any extreme values and hence all the values did not require any further treatment. Based on these observations, the study variables were deemed to be theoretically valid and that test of no outliers could be upheld for the study variables.

3.2.3 Test of Autocorrelation for Reconfiguring Capability

This test was carried using Durbin-Watson test. A D-W (*d*) statistic an of 1.836 was generated, confirming absence of autocorrelation in the parameters measuring reconfiguring capability (Argyrous, 2011).

3.3 Inferential Results

This study tested the null hypothesis H_01 : *Reconfiguring capability does not have a statistically significant effect on performance of commercial banks in Kenya*. The weighted measures of reconfiguring capability were processed using python libraries that is, pandas, statsmodels. api, statesmodels. formula.api, statsmodel.api and statsmodel.stats. This study applied 80% to 20% proportions for the train and test respectively. Simple OLS output are presented in Table 2.

Table 2: OLS Regression Summary for Reconfiguring Capability

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Statsmodels Linear Regression Summary:
                                OLS Regression Results
=====
Dep. Variable:      Bank_Performance    R-squared:                0.338
Model:              OLS                Adj. R-squared:           0.314
Method:             Least Squares       F-statistic:              14.28
Date:               Sun, 20 Apr 2025     Prob (F-statistic):       0.000759
Time:               09:53:01            Log-Likelihood:           29.996
No. Observations:  30                  AIC:                      -55.99
Df Residuals:      28                  BIC:                      -53.19
Df Model:           1
Covariance Type:   nonrobust
=====
                                coef    std err          t      P>|t|      [0.025    0.975]
-----
const                0.7354    0.388         1.896    0.068    -0.059    1.530
Reconfiguring_Capability  0.4249    0.112         3.778    0.001     0.195    0.655
=====
Omnibus:              7.310    Durbin-Watson:           1.388
Prob(Omnibus):        0.026    Jarque-Bera (JB):        5.607
Skew:                 -0.976    Prob(JB):                 0.0606
Kurtosis:              3.820    Cond. No.                  86.2
=====
    
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The R-Squared coefficient of 0.338 confirm that an estimated 33.8% of the variations in commercial banks performance is accounted for by reconfiguring capability. In addition, the Table shows that F-statistic of 14.28 and an associated Prob (F-statistic) of 7.59e-04. These statistics indicate that simple linear measures in the restricted model of reconfiguring capability and performance of commercial banks are not a random occurrence. This study rejects the null hypothesis H_01 that *reconfiguring capability does not have a statistically significant effect on performance of commercial banks in Kenya*. The Table shows that coefficient (β) for reconfiguring capability was 0.4249 and an associated, $p>|t|$ value of 0.000 which was less than a p-value of 0.05, implying that reconfiguring capability is statistically significant in predicting performance of commercial banks in Kenya. These OLS regression model coefficients show that a 0.4249 change in reconfiguring capability would have a unit change increase in performance of commercial bank in Kenya. The results further shows that while the estimated beta coefficient is 0.4249, we have a 5% probability of error in stating that the true value will always be in the confidence interval (0.195, 0.655). The reviewed model for reconfiguring capability and performance is;

$$Perf = 0.7354 + 0.4249 (Reconfiguring\ capability) \dots\dots\dots(1).$$

These results are consistent with findings by (Frank et al., 2017; Schilke, 2014; Lecerf & Omrani, 2020; North & Varvakis, 2016) who also found that institutions could employ reconfiguring capabilities to enhance learning new competencies to navigate market upheavals and increase performance. Additionally, these findings corroborate that reconfiguring capability can support improvement of operational efficiency by exploiting their dynamic skills to respond to changes in the external landscape (North & Varvakis, 2016; Zollo et al., 2016). On the other hand, these results are inconsistent with those of Garrido et al. (2019) and Markovich et al. (2021) who found that investments in reconfiguration may not yield performance benefits, and might even lead to resource losses and hence can be negatively correlated with an entity's performance.

4. Discussion

4.1 Conclusions

The associated F-statistic of 14.28 and associated Prob (F-statistic) p-value of 7.59e-04, that is, ≈ 0 . Based on these two statistics, the research concluded on the study null hypothesis (H_01); reconfiguring capability does not have a statistically significant influence on performance of commercial banks in Kenya was rejected, and the study confirmed that indeed, there is a positive and statistically significant effect of reconfiguring capability on performance of commercial banks in Kenya. The study further finds that reconfiguring capability measured by institutional flexibility, resource reallocation and business network management practices are some of the forward-looking determinants for commercial banks performance and similar business models operating in similar contexts.

4.2 Recommendations

This study recommends a review of policy/ies driving open reporting among bank departments, leveraging on internal capacity to drive performance and regular review of operational collaborations and partnerships policy for alignment with changes in the external environment. Further, the study recommends innovative approaches to institutional flexibility, resources mapping and reallocations and business network management for sustained performance of these commercial banks in terms of both lagging and strategic performance metrics.

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