

# Strategic Intelligence and Firm Performance: An Analysis of the Mediating Role of Dynamic Capabilities from Commercial Banks in Kenya

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**Abstract** Commercial Banks in Kenya supports economic development by providing finances to businesses and individual investors. In addition, banks facilitate savings, create jobs opportunities, assist in wealth creation, and eradication of poverty. However, not all the banks have had positive growth trend in the period 2016 to 2018. Records indicate that some banks such as Chase Bank, Imperial bank and Charterhouse Bank had poor performance impeding continuity. The hypothesis of the study was that Dynamic capabilities had no significance mediating effect on the relationship between strategic intelligence and performance of Commercial banks in Kenya. This study was anchored on resource-based view, dynamic capabilities theory and balanced scorecard model. The study used both primary and secondary data. Primary data was collected through 143 questionnaires distributed to the respondents while secondary data was obtained through the annual reports and publications of the Central Bank of Kenya, for the period 2016 to 2018. Data was analyzed using multiple linear regression and the findings of the study indicate that dynamic capabilities had a statistically mediating effect on the relationship between strategic intelligence and the performance of commercial banks in Kenya. The study recommends that commercial banks policy makers should consider restructuring their internal and external competitive strategies, by involving behavioural scientists to device better ways of achieving the intended competitive advantage that can lead to superior performance of their banks.

**Keywords:** *strategic intelligence, dynamic capabilities, commercial banks and performance, resource-based view*

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## 1. Introduction

Banks are a strong resource for economic development of a nation and the main supplier of money hence act as custodian of wealth and economic growth [1]. Furthermore, banks facilitate savings, create jobs opportunities, assist in wealth creation, eradicate poverty while increasing the growth domestic product among others activities which support economic growth [2]. Moreover, banks act as medium of exchange of a country, whereby they mobilize money resources and provision of loans [3]. Thus, banks performance is vital because it represents the financial position of an individual bank. For example, low return on equity reflects poor performance, while the opposite of the same represents good performance of that particular banks [4]. Moreover, banks performance reflects the way such a bank uses its resources to achieve its objectives [5]. Navajas *et al.* [4] adds that, the financial indicators chosen by a particular

entity should indicate its vulnerabilities of the financial sector in general, hence acting as a tool of macroeconomic policy. In other words, bank performance is the general measure of its financial health over a given period of time. This is the main interest of the shareholders, which is achieved through value maximisation of their investment.

Despite the fact that the bank performance may be measured quantitatively, general performance of the bank cannot be measured through financial ratios only but also through intangible non-financial measurers which are linked to organisation bank strategies [6]. Additional, efficiency and effectiveness in banking are vital for stability and sustainability for individual bank and national economic development as a whole [7]. Bank stability is a great concern to the whole global economy since they determine international trade of different nations [8]. This is one of the reasons that necessitate evaluation of the bank's performance. The regulators ensure that banks achieve the set standards of operation by enforcing the law of disclosure to each bank's overall financial status, ranging from return on equity and return on assets among other measures [9].

The Return on Equity (ROE) is an important measurement of performance in this study since it is an expression of a company's net income. The measure, reflects the value of shareholders' returns and explains company's market value, hence the interest of shareholders [10]. Accordingly, the shareholders prefer the return on equity as better investment line since the value created by the bank is cost effective compared to cost of Equity Capital (COE) [6]. In essence, when a bank reports a high return on equity, this signifies that the value created by the managers is cost effective hence attractive to shareholders [11]. In this case, shareholders select return of equity as base for analysing company's profitability and efficiency in a given commercial bank. On other hand the non-financial measures adopted in this study were the Customer perspectives, learning and growth and the internal processes. Kaplan argues that, for better measurements of performance, organisation should consider using both financial and non-financial measurements [12].

To meet set standard therefore, banks are continuously involved in environmental analysis through gathering formal and informal data to evaluate the customer tests and preference, and also to make sure that their customers achieve their investment goals. This they can only be manage through utilizing dynamic capabilities found within and outside their scope of operation. Dynamic capabilities build and integrate bank resources such as equity or debts to encourage economic growth. This then requires more investors to continue investing, and on other hand bank manager to employ strategies that can enhance maximization of profits to retain more earnings. Dynamic capabilities are supported by firm routines and managerial skills to build and reconfigure resources and capabilities to transform business portfolio. According to Eisenhardt and Martin [13] dynamic capabilities are a complement to the Resources-Based View (RBV). While the resource-based view theory focus on competitive advantage of the firm, dynamic capabilities concentrate more on competitive survival in a volatile business environment.

Dynamic capabilities can further be linked with connectivity strategy, expertise or competition [14]. In other words, these are best practices which secure an organisation a competitive advantage [13]. Moreover, dynamic capabilities are process for sensing, seizing and transforming contested businesses such as banking industry. Thus, a firm with ability to employ various capabilities, adapt unique competitive strategies is regarded as one that can stand a stiff competitive environment and achieve superior performance [15]. Consequently, integrating dynamic capabilities with business strategies therefore is one way that business can grow, and especially for the commercial banks this is one way of increasing liquidity and reducing bank risk, while keenly taking precautions against bank insolvency. This requires banks to understand trends have clear vision about the future of the business, perceive, synthesize and integrate viable idea for a common purpose, enhance team work in business and embrace networking, and this is strategic intelligence.

Strategic intelligence is an intelligence for formation of corporate policies competitive objectives and business planning. Strategic intelligence in banking provides guidance and direction to assist bank policy makers with

sound decision making. In a changing business environment, commercial banks manager uses strategic intelligence in information collection and analysis approaches to provide guidance and direction to assess banks policies, make analysis and determine way forward of the business. This also involves setting priorities, goals and direction at a broader level by combing external and internal data hence realizing a complete data about the business competition and also identifying its position in a competitive environment. This helps the business to assess demand and suitable product services that can lead to stability and sustainability of the business.

Strategic intelligence is a synergy of business intelligence competitive intelligence and knowledge management as business intelligence; it is counter intelligence to an, organization [16]. Moreover, it is operational or function oriented hence scope focused [17]. It involves assimilating of economic information to form a profound understanding of subjects of continuity in business [18]. Equally, it offers detailed evaluation of trends and business changes to recognize and warn on variations related to the issues that may affect the imminent planned conditions [19]. According to Maccoby [20] strategic intelligence is a projection system while Levine, Bernard and Nagel [21] refer to it as a cognitive ability, hence used widely by strategic thinkers of a firm. Thus, it is an organisation environmental analysis tool [22]. Strategic intelligence is power oriented theory, and offence-defense strategy, in that it equips strategists with intrinsic power to collect, process, analyze and disseminate intelligence and solve related business problems [23].

Strategic intelligence involves speculative process while focusing on future development, environment analysis, evaluating and observing patterns, trends, threats, weaknesses, and opportunities hence it is research oriented [24,25]. It is inward-gazing cognitive skills, coordinates skills, optimizes and integrates competitive capabilities [21]. It is about having clear vision, and being able to mobilize team, hence creating a better future for an organisation, customer, partners, and employees [26]. Xu, [27] argue that strategic intelligences is an ability to have precise data in the hands of right individuals at the expected stint, and useful in creating grand approaches to achieve firm's competitive strategy [28].

Moreover, strategic intelligence is competition oriented, in the sense that it is a synergy of different business intelligences [29]. Since strategic intelligence is business intelligence, it is real time collection of decision support technologies and skills, used to store and analyze information while enabling access to vital information and empowering managers to make better and faster decisions appropriate for organisation performance [30,31]. Moreover, it is a competition focused model allowing for information sourcing, disseminating and intelligently analysing it and demonstrating how executive can best utilize internal and external information for viable decisions of the firm [32]. Further, it is also an operational capability, technological capability and technical capability and an intellectual capability for a firms' innovation [33,34].

Conversely, as competitive intelligence, is an ethical concept of decision making based on the competitor

information and supported by strategic industrial intelligence. Moreover, it is tactical and competitive focused [35]. Additionally, it is competitor actions and counter intelligence, it defends market share and retain clients [36,37]. It enhances competitive advantage hence increasing revenue and profitability [37,38]. Furthermore, it is a defensive intelligence [35,39]. Thus, it is a counter intelligence, tactical intelligence and industrial intelligence focused. As knowledge management, strategic intelligence encompasses knowledge creation, deployment, sharing and knowledge transfer, for the purpose of achieving organisation's competitive advantage [40]. Thus, it is a connector for people, connects processes, and technology, hence leveraging information for easy business execution and competition [41]. Accordingly, as knowledge management, strategic intelligence is a significant aspect for organization survival and maintenance of competitiveness [42].

Moreover, as knowledge management, it is recognized as a basis for designing an organisation's strategies to create, deploy, share and transfer data for value creation to both internal and external customers. Accordingly, Marr, Schiuma and Neely [43] refers to it as an organisation's important asset for value addition and an effective tool for stimulating innovation and cultural changes. Furthermore, intelligent knowledge management evolves corporate and enhances the availability of competitive advantage and organisation performance [44]. Intelligent knowledge management focusses on information management, hence improving communication through sharing knowledge and transferring knowledge among collaborators [45]. It is also value addition when deployed, creative, and enhances innovation [46]. Bennett and Bennett [47] refer to it as an intellectual resource.

## 2. Review of Literature

### 2.1. Theoretical Review

This study is anchored on the resource-based view (RBV), the theory focuses on the achievement of competitive advantage as argued by Penrose [48,49,50]. On other hand Prahalad and Hamel [51] also wrote about the core competence of the corporation, expounding Penrose concept of the growth of the firm, while Barney [52] focused on firm resources and sustained competitive advantage which can be attained through Penrose idea of strategic experimentation in diversification strategy through adaptation and creativity. The theory is referred to as a managerial framework to determine the best resources to exploit, assets, capabilities and competences with potential for the growth of the firm [53]. The resource-based view theory assumes that if a firm can protect its resources against imitation, transferred, or substituted, then that is an advantage and can withstand competitive forces for a longer time, obtain superior performance [54]. Barney [52] argues that a right focused mind set in the right context may represent a source of sustained competitive advantage.

Good performance in banking is as a result of exploiting the right resources to obtain superior financial outcomes that confer it competitive advantage [54,55]. Implementation

of strategic intelligence makes banks to outperform each other, hence confirming the assumption that competitive advantages happens as a result of using different bundles of resources in a given company [56]. If companies implement retention strategies in banking, then the resources remain immobile. Richard [57] used income per employee and return on equity. Moreover, other immobile strategies can be those which could enhance service quality, such as customer care, internal process or innovation and learning [58].

Barney [52] argue that competent resource should be valuable, rare, costly to imitate and non-substitutable, involve engagement in reflective practices, results from a conscious strategic decision from the firm managers. Thus, if resources can increase firm's value, (return on equity), then it is valuable. Madhani [56] argue that organisation should concentrate more on the available resources, but also, they should be rare to avoid competitive parity and costly to imitate or substituted by the rival firms. Finally, firms should be easily exploited easily, cheaply acquired and valuable resources, rare and imitable faster lead to superior performance, hence improve the nation economic status [59]. Though resource-based view has been researched by many scholars it is criticized that it's not updated, hence fail to be innovative and competition oriented in the turbulent market environment [60]. Thus, dynamic capabilities complement the weaknesses of resources-based view. Accordingly, Teece and Pisano [15] the authors of dynamic capabilities argue that organisation basic competencies should be used to create short-term competitive position that can further lead to longer-term competitive advantages. The scholars suggest that organisation should adopt efficient and responsive changes and develop their resources (dynamic capabilities) to maintain capability standards to ensure competitive survival. Pisano [14] argue that, rather than chasing after intangible assets organisation should instead focus on how to link competition in product markets with creative capabilities.

While resources-based view of the firm emphasizes on sustainable competitive advantage [61]; dynamic capabilities base its emphasis on competitive survival due to current torrents in the turbulent business environment [62]. Dynamic capability theory fits well in the banking environment, which is highly revered, but volatile business. According to Teece, Pisano and Shuen [15] dynamic capabilities theory focuses on the ability of the firm to quickly orchestrate and reconfigure external competences and appropriately apply them to cater for the current market needs. However, scholars criticize the theory, that it is vague and tautological, in that though it helps to address the how business adapts to changing environment, it fails to be exact, moreover, the capabilities of theory are difficult to identify or operationalize [63]. Thus, strategic intelligence theories of cognitive reasoning, ability and intellectual capacity for an individual to execute particular tasks with diligence comes into play. Strategic intelligence is a type of competitive intelligence for strategic purpose, it involves strategic decision making [64].

Strategic intelligence theory contends that if an individual knows how an opponent performs one task then it's easy to manipulate the next activity's outcome. In

other words, it is a stimulus response theory which has its origin from military setting. The theory is associated with the ability to produce variety of ideas, solution, render judgment and make intellectual decision whether correct or wrong [24]. It is the ability to formulate new ideas combined with related facts or information and experiences. Strategic intelligence in business is a cognitive skill of ethical collection of market competitive insights while systematically analysing environment [65]. It is ability to identify the strength, weakness, opportunities and threats, and further identify the intentions of competitors, employ preventive measures where threats feature and capture the potential opportunities. Thus, strategic intelligence is the ability to establish secrets of a competitor [66]. It helps to shape efforts to lead the firm to higher standing, provides alerts on competitive ranges, and focus on longer horizons of firm performance, hence differentiated from tactical intelligence [67]. Strategic intelligence is the ability to predict, find combine analytical skills and solve business problems, while anticipating competitor's behavior and preempt it [68].

However, the theory has been criticized in that, though prediction may result to positive outcome, uncertainty is often vast, innovation is continuous, thus the best option should be to priorities and try to achieve own goals. Thus, the model of dynamic capabilities comes to enhance learning to improve internal business processes, and further extend better services to customers and enable business to achieve own goals.

The origin of balanced scorecard model dates back in 1950s, where it advocates for financial and non-financial performance measurements relating to customer delivery time, manufacturing processes times and effectiveness of new product development [69]. The balanced scorecard financial measures focus on economic consequences related to profitability with shareholder in mind. Shareholders are basically attracted by clear, timely or efficient financial data that provide clear picture about its current and future performance [12]. Balanced scorecard in this perspective, therefore, shows organization's performance in meeting its objectives relating to shareholder's needs. Further, in learning perspective, the model emphasizes the importance of updating skills and edifying attitude related to individual and excellence for the organization growth. According to Kaplan [70] companies improve management of their intangible assets by integrating learning and training in their strategic plan. Training leads to learned knowledge, and knowledge is key to performance of any organizations.

Accordingly, Kaplan and Norton [69] contend that learning constitutes mentors and trainers within the organization, thus leading to effectiveness and efficiency due to enhanced communication. Moreover, Khedr, Abdel-Fattah, and Solayman, [71] added that this can lead to clarity and scrutiny of organisation and measurements of outcomes through business intelligence techniques and tools. The aspect of balance scorecard on the internal business processes is where the organisation can use business intelligence tool to support the strategic plans. This perspective basically touches the managers' effectiveness on their activities directed to products and is mission oriented. Such processes are repetitive in nature

hence easier to measure and benchmark, such that the strategic intelligence of the organisation are the innovation type of intelligence, aimed at capturing customers'/stakeholder requirements.

The business intelligence analytical tools are applied to simplify decision making and actions are set up with measurable indicators after carrying out a survey to assess the customers'/stakeholder expectations [72], such that the organisation competitive intelligence are based on market survey and seeks to define, gather, analyze, and distribute intelligence about products, customers'/stakeholder (competitor) needs. Further the organisation benchmark on the market survey activities and responds on the received feedback from the stakeholders [73]. The customer perspective on the other hand, is basically directed towards the stakeholders such as banks regulators, investors, government agents, economists, competitors among others.

## 2.2. Empirical Review

The dynamic capabilities describe ways in which competitive advantages is built rapidly in an uncertain environment [74]. According to Teece [75], the strength of dynamic capabilities of a firm helps in shaping its proficiency at business model design. Thus, Teece further note that a business model influences the firm's dynamic capabilities, however, the said relationship was subject to empirical studies. In contrast, the current empirical study affirms that dynamic capabilities of a firm influence the formation of a business model of an organisation. These findings are also supported by Čirjevskis [76]. On the other hand, Lin [77] affirms that both IT capability and human capital investment have an impact on value-creation and banking firms' performance. The researchers concentrated only on IT capabilities and human capital. However, they ignored the intellectual capital that influences operational capabilities [78]. Singh and Rao [79] uphold that, dynamic capabilities have statistically significant relationship with banks' financial and non-financial performance. However, Hsu and Wang [80] critique these results, accordingly they state that "dynamic capabilities do not completely mediate the respective effects of human capital and relational capital on performance, but does so only partially", thus they are important for accumulating research and development and marketing capabilities. However, Hassan, Mei and Johari [81] affirm that there is a positive relationship between intellectual capital and operational capabilities and organizational capabilities. Further, their research indicated that operational capabilities mediate the relationship between intellectual capital and organization performance. Aminu and Mahmood [82] also confirmed coincidentally similar results.

On the other hand, Adebisi and Ogunkuya [83] research showed that dynamic capabilities and network resources are significantly related to organisation performance. Moreover, Osisioma, Nzewi and Mgbemena [84] found that dynamic capabilities facilitate performance in Nigeria banking firms. These findings were equally confirmed in the current study in Kenya commercial banks. This study tested the following hypothesis:



H01: Dynamic capabilities have no significance mediating effect on the relationship between strategic intelligence and performance of commercial banks in Kenya

### 3. Research Methodology

The study used descriptive survey and explanatory research designs. According to Johnson, Onwuegbuzie and Turner, [2] adoption of two designs provide a wider spectrum for more informed data interpretation and conclusion as compared to a single research design. Descriptive design is used when the problem has been well designed and where the researcher can engage in a field survey by going to the population of interest for the informants to explain certain features about the problem under study [85,86,87], while explanatory research design identifies the cause and effect, among the study variables [88]. The researcher administered questionnaires to 143 respondents and reviewed financial records for the period 2016 to 2018. Multiple regression analysis was used to test the mediating effect of dynamic capabilities on the relationship between strategic intelligence and firm Performance. The process involved four steps as stipulated by Baron and Kenny [89] as follows:

Step 1: Regression analysis was performed to assess the relationship between performance of commercial banks and strategic intelligence while ignoring the effect of dynamic capabilities. The following regression models were used to test the main effect:

$$ROE = \beta_0 + \beta_1 SI + \varepsilon \quad (1)$$

$$NFP = \beta_0 + \beta_1 SI + \varepsilon \quad (2)$$

Where: -

**ROE** = Return on Equity / Financial Performance

**NFP** = Non-Financial Performance

**$\beta_0, \beta_1$**  = Beta coefficients

**SI** = Strategic Intelligence

**$\varepsilon$**  = Error Term.

Step 2: The researcher performed the regression analysis to assess the relationship between dynamic capabilities and strategic intelligence as in the regression model shown below;

$$DC = \beta_0 + B_2 SI + \varepsilon \quad (3)$$

Where: -

**DC** = Dynamic Capabilities

**$\beta_0, \beta_2$**  = beta coefficient

**SI** = Strategic Intelligence

**$\varepsilon$** =Error Term

Step 3: Regression analysis was conducted to establish the relationship between performance and dynamic capabilities while strategic intelligence remains constant as shown below;

$$ROE = \beta_0 + \beta_3 DC + \varepsilon \quad (4)$$

$$NFP = \beta_0 + \beta_3 DC + \varepsilon \quad (5)$$

Where: -

**ROE** = Return on Equity / Financial Performance

**NFP** = Non-Financial Performance

**$\beta_0, \beta_3$**  = Beta coefficient

**DC** = Dynamic Capabilities

**$\varepsilon$** =Error Term.

Step 4: Finally, a regression model was conducted linking performance, dynamic capabilities and strategic intelligence, while noting the significance of the relationship between them as shown below

$$ROE = \beta_0 + \beta_4 SI + \beta_5 DC + \varepsilon \quad (6)$$

$$NFP = \beta_0 + \beta_4 SI + \beta_5 DC + \varepsilon \quad (7)$$

Where inclusion of the dynamic capabilities dropped the relationship between the strategic intelligence and performance displayed a full mediation. On the other hand, partial mediation was explained when the dynamic capabilities accounted for some, but not all, of the relationship between the strategic intelligence and performance.

Where partial mediation was experienced, this suggested that there was both significant relationship between the mediator (dynamic capabilities) and the dependent variable (performance), and also the direct relationship between the independent variable (strategic intelligence) and dependent variable (performance). Table 1 shows the decision criteria used on the mediation relationship.

**Table 1. Mediation Relationship Decision Criteria**

| Outcome                                                                                                                                                                                                                                    | Conclusion                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| $\beta_1$ is significant in model 3.4 at $p < 0.05$                                                                                                                                                                                        | No overall relationship to be mediated              |
| $\beta_1$ is significant in model 3.4 at $p < 0.05$                                                                                                                                                                                        | There exists an overall relationship to be mediated |
| $\beta_1$ significant in model 3.4 at $p < 0.05$<br>$\beta_2$ significant in model 3.5 at $p < 0.05$<br>$\beta_3$ significant in model 3.6 at $p < 0.05$<br>$\beta_1$ not significant and $\beta_4$ significant in model 3.7 at $p < 0.05$ | Complete Mediation                                  |
| B1 significant in model 3.4 at $p < 0.05$<br>B2 significant in model 3.5 at $p < 0.05$<br>B3 significant in model 3.6 at $p < 0.05$<br>$\beta_1$ significant and $\beta_4$ significant in model 3.7 at $p < 0.05$                          | Partial Mediation                                   |
| $\beta_1$ significant in model 3.4 at $p < 0.05$<br>$\beta_2$ significant in model 3.5 at $p < 0.05$<br>$\beta_3$ significant in model 3.6 at $p < 0.05$<br>$\beta_1$ and $\beta_4$ not significant in model 3.5 at $p < 0.07$             | No Mediation                                        |

Source: Baron and Kenny (1986)

### 4. Findings and Discussion

This part presents the mediating effect of dynamic capabilities on the relationship between strategic intelligence and performance of commercial banks in Kenya. The process of testing for the mediating effect of dynamic capabilities was guided by the three steps which were recommended by Baron and Kenny [89] as presented in the subsections that follow:

#### Step one: Strategic Intelligence and Performance of Commercial Banks in Kenya

In this step, a regression model was established to assess the effect of strategic intelligence on performance

of commercial banks in Kenya while ignoring the effect of Dynamic Capabilities. The results for this step are presented in Table 2 (a), (b) and (c)

Table 1 (a) shows the results of the model summary.

$$ROE = \beta_0 + \beta_1 SI + \varepsilon$$

$$NFP = \beta_0 + \beta_1 SI + \varepsilon$$

**Table 2 (a). Model Summary for Strategic Intelligence and Performance**

| Dependent Variable | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
|--------------------|-------|----------|-------------------|----------------------------|
| ROE                | 0.857 | 0.735    | 0.733             | 9.670111                   |
| NFP                | 0.903 | 0.815    | 0.814             | 0.57196                    |

Predictors: (Constant), SI

The findings in Table 2(a) indicated that the model linking strategic intelligence to ROE had an adjusted R square value of 0.733 which implies that strategic intelligence had high explanatory power on ROE since 73.3% of the ROE of commercial banks in Kenya can be elucidated by strategic intelligence. In the same way, the model linking strategic intelligence to NFP had an adjusted R square value of 0.814, which implies that strategic intelligence had high explanatory power on NFP since 81.4% of the NFP of commercial banks in Kenya can be explained by strategic intelligence. The regression model ANOVA is presented in Table 3 (b).

The results indicated in Table 2 (b) show that the F statistic value of 382.802 for the model linking strategic intelligence to ROE was significant (P-value = 0.000). Equally, the F statistic value of 608.316 for the model linking strategic intelligence to NFP was significant (P-value = 0.000). This implies that strategic intelligence contributes significantly to changes in both ROE and NFP of commercial banks in Kenya. In a related study, Kamara [90] who sought to identify the strategic value of strategic intelligence to Equity bank Kenya established that strategic intelligence was a high determinant of performance and strategic value of

Equity bank through provision of information that facilitated handling improvement of its strategies. The regression model coefficients are presented in Table 2 (c).

The results in Table 2 (c) reveal that the effect of strategic intelligence on ROE of commercial banks in Kenya was positive and significant (Beta = 0.639, P-value = 0.000). The effect of strategic intelligence on NFP of commercial banks in Kenya was equally positive and significant (Beta = 0.048, P-value = 0.000). The findings imply that a one unit increase in strategic intelligence leads to an increase in ROE and NFP of commercial banks in Kenya by 0.639 and 0.048 units respectively. The findings are consistent with that of Seitovirta [91] which indicated that strategic intelligence supports strategic decision-making by enhancing the collection, analysis, and distributing, planning and disseminating information to the organization's management team to use and formulate strategies that can enhance competitive advantage and firm performance. Consequently, it is displayed as system thinking, with ability to spot, combine and assimilate business fundamentals to achieve a common goal. This therefore, provides opportunity to stakeholders to access best services from the Kenya commercial banks. This observation conforms to Musau, Muathe and Mwangi [92] on financial inclusion strategy for commercial performance.

### Step two: Strategic Intelligence and Dynamic Capabilities

In the second step of Baron and Kenny [89] test of mediation, the independent variable (Strategic Intelligence) predicts the mediator (dynamic capabilities). The results for this step are presented in Table 3 (a), Table 3(b) and Table 3(c). Table 3 (a) shows the results of the model summary.

The following regression model was established.

$$DC = \beta_0 + B_2 SI + \varepsilon.$$

**Table 2 (b). ANOVA for Strategic Intelligence and Performance**

| Dependent Variable |            | Sum of Squares | Df  | Mean Square | F       | Sig. |
|--------------------|------------|----------------|-----|-------------|---------|------|
| ROE                | Regression | 35796.17       | 1   | 35796.17    | 382.802 | .000 |
|                    | Residual   | 12904.52       | 138 | 93.511      |         |      |
|                    | Total      | 48700.69       | 139 |             |         |      |
| NFP                | Regression | 199.004        | 1   | 199.004     | 608.316 | .000 |
|                    | Residual   | 45.145         | 138 | 0.327       |         |      |
|                    | Total      | 244.15         | 139 |             |         |      |

Model 1 Predictors: (Constant), SI

**Table 2 (c). Regression Model Coefficients for Strategic Intelligence and Performance**

| Dependent Variable |            | Unstandardized Coefficients |            | Standardized Coefficients | t       | Sig.  |
|--------------------|------------|-----------------------------|------------|---------------------------|---------|-------|
|                    |            | B                           | Std. Error | Beta                      |         |       |
| ROE                | (Constant) | -27.896                     | 2.026      |                           | -13.766 | 0.000 |
|                    | SI         | 0.639                       | 0.033      | 0.857                     | 19.565  | 0.000 |
| NFP                | (Constant) | 0.804                       | 0.120      |                           | 6.704   | 0.000 |
|                    | SI         | 0.048                       | 0.002      | 0.903                     | 24.664  | 0.000 |

**Table 3 (a). Model Summary for Strategic Intelligence and Dynamic Capabilities**

| R    | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .879 | 0.773    | 0.772             | 0.33017                    |

Predictors: (Constant), Strategic Intelligence

The findings in Table 3 (a) showed that the adjusted R square value was 0.772 which implies that strategic intelligence had high explanatory power on the mediator (Dynamic Capabilities). This implies that 77.2% of the dynamic capabilities of commercial banks in Kenya can be explained by strategic intelligence. The regression model ANOVA is presented in Table 3 (b).

**Table 3 (b). ANOVA for Strategic Intelligence and Dynamic Capabilities**

|            | Sum of Squares | Df  | Mean Square | F       | Sig. |
|------------|----------------|-----|-------------|---------|------|
| Regression | 51.301         | 1   | 51.301      | 470.608 | .000 |
| Residual   | 15.043         | 138 | 0.109       |         |      |
| Total      | 66.344         | 139 |             |         |      |

Dependent Variable: Dynamic Capabilities  
Predictors: (Constant), Strategic Intelligence

The results indicated in Table 3 (b) show that the F statistic value of 470.608 for the model linking strategic intelligence to dynamic capabilities was significant (P-value = 0.000). This was an indication that strategic intelligence contributes significantly to changes in dynamic capabilities of commercial banks in Kenya. The regression model coefficients are presented in Table 3 (c).

**Table 3 (c). Regression, Strategic Intelligence and Dynamic Capabilities**

|                        | Unstandardized Coefficients |            | Standardized Coefficients |        | Sig.  |
|------------------------|-----------------------------|------------|---------------------------|--------|-------|
|                        | B                           | Std. Error | Beta                      | t      |       |
| (Constant)             | 2.447                       | 0.069      |                           | 35.362 | 0.000 |
| Strategic Intelligence | 0.024                       | 0.001      | 0.879                     | 21.694 | 0.000 |

Dependent Variable: Dynamic Capabilities

**Optimal Model**

The results in Table 3 (c) showed that strategic intelligence was significant positively affected dynamic capabilities of commercial banks in Kenya (Beta = 0.024, P-value = 0.000). The findings imply that an increase in strategic intelligence by one unit leads to an increase in dynamic capabilities of commercial banks in Kenya by 0.024 units.

**Step Three: Dynamic Capabilities and Performance of Commercial banks in Kenya**

The third step of testing for mediation entails testing whether the mediator (dynamic capabilities) is correlated with the outcome variable (performance of commercial banks in Kenya). The results for this step are presented in

Table 4 (a), Table 4(b) and Table 4(c). The following regression models were established:

$$ROE = \beta_0 + \beta_3DC + \epsilon$$

$$NFP = \beta_0 + \beta_3DC + \epsilon$$

**Table 4 (a). Model Summary for Dynamic Capabilities and Performance**

| Model | R    | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|------|----------|-------------------|----------------------------|
| ROE   | .752 | 0.566    | 0.563             | 12.37478                   |
| NFP   | .732 | 0.535    | 0.532             | 0.90662                    |

Predictors: (Constant), DC

The findings in Table 4 (a) showed that the adjusted R square value for the regression model linking dynamic capabilities to ROE was 0.563 which signifies a high explanatory power of dynamic capabilities on ROE of commercial banks in Kenya. The results indicate that 56.3% of ROE of commercial banks in Kenya can be explained by dynamic capabilities. Similarly, it was indicated that the adjusted R square value for the regression model linking dynamic capabilities to NFP was 0.532 which suggests that dynamic capabilities had high explanatory power on Non-Financial Performance (NFP) of commercial banks in Kenya. The results indicate that 53.2% of NFP of commercial banks in Kenya can be explained by dynamic capabilities. The findings are consistent with that of a study by Lin [77] carried out in Taiwan to find out whether dynamic capabilities had a direct effect on the creation of economic value and competitive advantage and established that it does. This underpins the importance of dynamic capabilities in explaining firm performance. The regression model is presented in Table 4 (b).

**Table 4 (b). ANOVA for Dynamic Capabilities and Performance**

|            | Sum of Squares | Df  | Mean Square | F      | Sig. |
|------------|----------------|-----|-------------|--------|------|
| Regression | 355810.9       | 1   | 355810.9    | 372.57 | .000 |
| Residual   | 131792.4       | 138 | 955.017     |        |      |
| Total      | 487603.3       | 139 |             |        |      |

Dependent Variable: Performance

Predictors: (Constant), Dynamic Capabilities

The results indicated in Table 4 (b) indicated that the F statistic value of 372.57 for the model linking dynamic capabilities to performance of commercial banks was significant (P-value = 0.000). This was an indication that dynamic capabilities contribute significantly to changes in performance of commercial banks in Kenya. Another study by Wamba, Gunasekaran, Akter, Ji-Fan Ren and Dubey [93] also established that dynamic capabilities enhance commercial banks performance and growth of business institutions. The regression model coefficients are presented in Table 4 (c).

**Table 4 (c). Regression, Dynamic Capabilities and Performance**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |  | t       | Sig.  |
|-------|------------|-----------------------------|------------|---------------------------|--|---------|-------|
|       |            | B                           | Std. Error | Beta                      |  |         |       |
| ROE   | (Constant) | -69.485                     | 5.897      |                           |  | -11.783 | 0.000 |
|       | DC         | 20.385                      | 1.519      | 0.752                     |  | 13.417  | 0.000 |
| NFP   | (Constant) | -1.854                      | 0.432      |                           |  | -4.290  | 0.000 |
|       | DC         | 1.404                       | 0.111      | 0.732                     |  | 12.611  | 0.000 |

The results in Table 4 (c) reveal that the effect of dynamic capabilities on ROE of commercial banks in Kenya was positive and significant (Beta = 20.385, P-value = 0.000). That of dynamic capabilities on NFP of commercial banks in Kenya was correspondingly positive and significant (Beta = 1.404, P-value = 0.000). The findings imply that an increase in dynamic capabilities by one unit leads to an increase in ROE and NFP of commercial banks in Kenya by 20.385 and 1.404 units respectively. This is an indication that dynamic capabilities are an important source of commercial banks performance, learning, integration and alliance management.

#### Step Four: Strategic Intelligence, Dynamic Capabilities and Performance

The study lastly established the effect of both strategic intelligence and dynamic capabilities on performance of commercial banks in Kenya. The results for this step are presented in Table 5 (a), Table 5(b) and Table 5(c). The following regression models were established:

$$ROE = \beta_0 + \beta_4 SI + \beta_5 DC + \varepsilon$$

$$NFP = \beta_0 + \beta_4 SI + \beta_5 DC + \varepsilon$$

**Table 5 (a). Strategic Intelligence, Dynamic Capabilities and Performance**

| Model | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| ROE   | 0.857 | 0.735    | 0.731             | 9.705152                   |
| NFP   | 0.912 | 0.832    | 0.830             | 0.54694                    |

Predictors: (Constant), DC, SI

The mode summary findings in Table 5 (a) showed that the adjusted R square value for the regression model linking strategic intelligence and dynamic capabilities to ROE was 0.731 which implies that dynamic capabilities and strategic intelligence had high explanatory power on ROE of commercial banks in Kenya. It can be argued that 73.1% of ROE of commercial banks in Kenya can be explained by both strategic intelligence and dynamic capabilities. It was equally ascertained that the adjusted R square value for the regression model linking strategic intelligence and dynamic capabilities to NFP was 0.830 which implies that dynamic capabilities and strategic

intelligence had high explanatory power on NFP of commercial banks in Kenya. This shows that 83% of NFP of commercial banks in Kenya can be explained by both strategic intelligence and dynamic capabilities. The regression model is presented in ANOVA Table 5 (b).

The results on the analysis of variance summary reveal that the F statistic value of 190.024 for the regression model linking strategic intelligence and dynamic capabilities to ROE and the F statistic value of 339.588 for the regression model linking strategic intelligence and dynamic capabilities to NFP were significant at 5% level of significance (Sig = 0.000). The findings imply that the model linking dynamic capabilities and strategic intelligence to both ROE and NFP of commercial banks in Kenya were significant. This was an indication that both dynamic capabilities and strategic intelligence contribute significantly to changes in performance of commercial banks in Kenya. The regression model coefficients are presented in Table 5 (c).

The findings in Table 5 (c) show that the effect of strategic intelligence on ROE of commercial banks was positive and significant (Beta = 0.644, Sig = 0.000). In contrast, dynamic capabilities had a positive but not significant effect on ROE of commercial banks in Kenya (Beta = 0.182, Sig = 0.942). In regard to NFP, the effect of strategic intelligence on NFP of commercial banks was positive and significant (Beta = 0.060, Sig = 0.000). Correspondingly, dynamic capabilities had a positive and significant effect on NFP of commercial banks in Kenya (Beta = 0.526, Sig = 0.000). The results imply that a unit increase in strategic intelligence and dynamic capabilities leads to an increase in ROE of commercial banks by 0.644 and 0.182 units respectively. Equally, a unit increase in strategic intelligence and dynamic capabilities leads to an increase in NFP of commercial banks by 0.060 and 0.526 units respectively. These findings are consistent with the results of a study by Adebisi and Ogunkuya (2014) who investigated the impact of dynamic capabilities and network resources on bank performance, in the Nigerian business environment and established that dynamic capabilities and network resources were significantly related to Nigerian banking sector and that they had significant effect on performance.

**Table 5 (b). Strategic Intelligence, Dynamic Capabilities and Performance**

| Model |            | Sum of Squares | Df  | Mean Square | F       | Sig. |
|-------|------------|----------------|-----|-------------|---------|------|
| ROE   | Regression | 35796.67       | 2   | 17898.33    | 190.024 | .000 |
|       | Residual   | 12904.03       | 137 | 94.19       |         |      |
|       | Total      | 48700.69       | 139 |             |         |      |
| NFP   | Regression | 203.168        | 2   | 101.584     | 339.588 | .000 |
|       | Residual   | 40.982         | 137 | 0.299       |         |      |
|       | Total      | 244.15         | 139 |             |         |      |

Predictors: (Constant), DC, SI

**Table 5 (c). Strategic Intelligence, Dynamic Capabilities and Performance**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |        |       |
|-------|------------|-----------------------------|------------|---------------------------|--------|-------|
|       |            | B                           | Std. Error | Beta                      | t      | Sig.  |
| ROE   | (Constant) | -27.452                     | 6.451      |                           | -4.255 | 0.000 |
|       | SI         | 0.644                       | 0.069      | 0.863                     | 9.347  | 0.000 |
|       | DC         | 0.182                       | 2.502      | 0.007                     | 0.073  | 0.942 |
| NFP   | (Constant) | 2.091                       | 0.364      |                           | 5.751  | 0.000 |
|       | SI         | 0.060                       | 0.004      | 1.144                     | 15.562 | 0.000 |
|       | DC         | 0.526                       | 0.141      | 0.274                     | 3.731  | 0.000 |



## 5. Conclusion and Policy Recommendation

### 5.1. Conclusion

This study investigated the mediating effect of dynamic capabilities between strategic intelligence and performance of commercial banks in Kenya. From the findings, it is concluded that dynamic capabilities indeed mediate the relationship between Strategic Intelligence and Banks performance in Kenya. Moreover, it is clear that dynamic capabilities can enhance development of strategies for Kenya banking sector and improve the economic status of the county.

### 5.2. Policy Implications

As noted, dynamic capabilities are a potential integrative approach of understanding the new sources of competitive advantage. In this case therefore, senior managers can use it to develop useful company strategies to enable them to adapt the continuous changing business environment in the banking sector. To ensure survival therefore, the policy makers can consciously concentrate their efforts on aligning their internal processes with their set standards, while employing strategic intelligence skills in order to incorporate the internal and external environment needs for their businesses, with main objective of attaining superior performance. Further, the commercial banks policy makers should restructure their competitive strategies, either; they should involve behavioural scientists to device better ways for effectiveness of the intended competitive models. The behavioural scientists normally lie behind the consumer's mind, such that they can have a deeper understanding on consumer needs, which may at the end improve the commercial banks performance.

### 5.3. Limitation of the Study

This study sought to investigate the mediating effect of dynamic capabilities on the relationship between strategic intelligence and performance of commercial banks in Kenya. Marjan [94] and Muathe [86], self-reporting which was used in primary data collection could have created self-generated validity and thus inflate causal linkage. Nevertheless, this study gives insights into the mediating effect of dynamic capabilities on the relationship between strategic intelligence and performance of commercial banks in Kenya.

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