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# Strategic Organizational Resources and Competitive Advantage of Commercial Banks in Nairobi City County, Kenya

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## Abstract

The purpose of this study was to examine the effect of strategic organizational resources on the competitive advantage of commercial banks in Nairobi City County, Kenya. Guided by the Resource-Based View, the study adopted a descriptive research design and a census of 150 management-level employees drawn from finance, ICT, human resource, and operations functions. Data were collected using structured questionnaires, with validity supported through expert review and pilot testing and reliability assessed using Cronbach's alpha. A total of 130 questionnaires were returned, representing an 86.67% response rate. Correlation analysis showed significant positive associations between competitive advantage and ICT resources ($r = 0.701$, $p < 0.01$), human resources ($r = 0.689$, $p < 0.01$), financial resources ($r = 0.674$, $p < 0.01$), and physical assets ($r = 0.652$, $p < 0.01$). The multiple regression model explained 55.0% of the variance in competitive advantage ($R^2 = 0.550$). ICT resources were the strongest significant predictor ($B = 0.238$, $\beta = 0.314$, $p < 0.001$), followed by financial resources ($B = 0.198$, $\beta = 0.287$, $p = 0.002$) and physical assets ($B = 0.183$, $\beta = 0.223$, $p = 0.008$), while human resources were positive but not statistically significant ($B = 0.060$, $\beta = 0.091$, $p = 0.316$). The study concludes that competitive advantage depends on the coordinated deployment of financial, technological, human, and physical resources and recommends prioritizing digital capability, financial resilience, digitally aligned human capital, and integrated physical-digital service infrastructure.

**Keywords:** *Strategic Organizational Resources, Competitive Advantage, Commercial Banks, Resource-Based View, Nairobi City County*

## 1.0 Introduction

Commercial banks play a central role in economic development by facilitating financial transactions, providing credit, supporting investment, and promoting business growth. In an increasingly competitive financial environment, banks rely on organizational resources such as technological capabilities, human capital, financial strength, and strategic capabilities to achieve sustainable competitive advantage (Mugambi, 2020). The rapid growth of fintech, digital banking, and changing customer expectations has compelled commercial banks globally to adopt customer-oriented strategies and digital transformation initiatives to improve efficiency, service quality, and market competitiveness (PwC, 2021). Globally, commercial banks have strengthened their competitiveness through effective utilization of organizational resources. In the United States, banks have achieved competitive advantage through advanced digital infrastructure, data analytics, strong regulatory systems, and customer-focused innovations. Investments in mobile banking, artificial intelligence-driven services, cybersecurity, and diversified financial products have enhanced operational efficiency and customer confidence (Chen, 2019; Bennett, 2020). These capabilities enabled U.S. banks to remain resilient during economic disruptions, including the COVID-19 pandemic (Federal Reserve, 2021).

Similarly, China's banking sector has gained competitive strength through technological advancement, government support, and extensive adoption of financial technology solutions. Chinese commercial banks have leveraged digital platforms to expand financial inclusion and improve access to banking services, particularly in rural areas. However, challenges such as regulatory pressures and increasing non-performing loans continue to affect profitability and operational performance (Zhang & Daly, 2019; Huang & Xie, 2021). In Africa, organizational resources remain critical determinants of commercial banks' competitiveness. Nigerian banks have invested heavily in digital banking, mobile payment solutions, and financial inclusion initiatives to increase market share despite challenges related to regulatory constraints, operational costs, and currency fluctuations (Olokoyo, 2018; Onikoyi, 2019; CBN, 2020). Ghana's banking sector has similarly improved competitiveness through regulatory reforms, capitalization improvements, customer service investments, and digital banking innovations, although concerns regarding credit risk and capital adequacy remain (Asamoah, 2021; Bawumia, 2018).

South Sudan's banking sector illustrates the challenges faced by banks operating in fragile economic environments. Political instability, inadequate infrastructure, limited technological adoption, and shortages of skilled personnel have constrained banks' ability to develop sustainable competitive advantage (Tenywa, 2020; World Bank, 2022). In contrast, Uganda has experienced significant banking sector growth through investments in digital banking, mobile money services, and financial inclusion strategies. Nevertheless, high operational costs and regulatory limitations continue to influence competitiveness (Mutebi, 2019; Bank of Uganda, 2023). Kenya represents one of the most dynamic banking environments in East Africa, characterized by rapid technological innovation, mobile banking expansion, and increased competition from fintech firms. Commercial banks, particularly those operating in Nairobi City County, have developed competitive advantage through investments in information technology, human capital development, customer segmentation, and innovative financial services (Ngugi, 2021). The introduction of mobile money platforms such as M-Pesa transformed the financial sector by improving access to banking services among previously underserved populations. However, increased competition from digital lenders and fintech companies has forced banks to continuously innovate and improve operational efficiency (CBK, 2023).

The relationship between organizational resources and competitive advantage is strongly supported by the Resource-Based View (RBV) theory. Barney (1991) argues that firms achieve sustainable competitive advantage when they possess resources that are valuable, rare, inimitable, and non-substitutable (VRIN). Empirical studies indicate that financial resources enhance stability and strategic flexibility, ICT resources improve efficiency and innovation, human resources promote productivity and service excellence, while physical assets strengthen market presence and service delivery. Therefore, effective management and deployment of organizational resources significantly influence service quality, profitability, customer satisfaction, market share, and overall competitiveness. Competitive advantage is a central concept in strategic management and explains how organizations achieve superior performance compared with competitors. Porter (1985) defines competitive advantage as an organization's ability to provide greater value to customers through lower costs or differentiated products and services. Barney (1991), through the RBV perspective, associates competitive advantage with possession and effective utilization of unique organizational resources. Prahalad and Hamel (1990) emphasize the importance of core competencies, while Amit and Schoemaker (1993) argue that strategic resources enable firms to adapt and maintain superiority in changing markets. Day (1994) further highlights innovation and responsiveness to customer needs as essential elements of sustained competitive advantage.

Competitive advantage can be measured through various indicators depending on the theoretical perspective adopted. Porter (1985) focuses on profitability, market share, and cost efficiency, whereas Barney (1991) applies the VRIO framework to assess resource-based advantages. Other scholars emphasize dynamic capabilities, innovation, customer satisfaction, brand reputation, and service differentiation as measures of competitiveness (Grant, 1991; Barwise & Strong, 2016). The banking sector is among the most competitive industries globally due to technological advancement, changing customer expectations, and the emergence of fintech providers. In Kenya, commercial banks operate in an environment characterized by rapid digital transformation, increased regulatory requirements, and intensified competition from mobile-based financial institutions. Consequently, banks must continuously improve efficiency, differentiate their services, and enhance customer engagement to maintain competitive positions.

Previous studies have examined competitive advantage among commercial banks. Mwaura (2014) identified technological innovation, customer service, and operational efficiency as key contributors to competitive advantage among Kenyan banks. Nyambara (2016) measured competitive advantage using market share, customer loyalty, and service differentiation, while Odhiambo and Wambua (2017) emphasized the contribution of human capital and corporate reputation. Mutinda (2019) examined cost leadership and differentiation strategies as sources of competitive advantage. This study adopts technological innovation, customer satisfaction, cost efficiency, and service differentiation as indicators of competitive advantage due to their relevance in Kenya's digitally driven banking environment. Organizational resources represent the assets, capabilities, and processes that firms utilize to achieve strategic objectives. Barney (1991) defines organizational resources as assets controlled by firms that facilitate strategy implementation and performance improvement. According to the RBV theory, resources must possess VRIN characteristics to create sustainable competitive advantage. Grant (1991) further explains that firms gain superiority when they effectively combine and deploy resources to exploit opportunities and manage threats.

Organizational resources in commercial banks consist of financial, technological, human, and physical resources. Amit and Schoemaker (1993) categorize resources into tangible and intangible assets, including financial strength, managerial expertise, technological capabilities, and organizational systems. Muchemi (2021) identifies human capital, financial capital, and technological infrastructure as key dimensions of organizational resources in banking. Njenga (2018) similarly emphasizes capital base, branch networks, employee competencies, brand reputation, and ICT infrastructure. In this study, organizational resources are conceptualized through four dimensions. Financial resources include capital reserves, liquidity, profitability, and budget allocation, which determine banks' ability to finance strategic initiatives (Njenga, 2018). ICT resources involve digital banking platforms, fintech innovations, cybersecurity systems, and information technology infrastructure, which enhance operational efficiency and customer experience (Muchemi, 2021; Amit & Schoemaker, 1993). Human resources comprise employee expertise, training, motivation, and productivity, which contribute to service quality and innovation (Grant, 1991). Physical resources include branch networks, ATMs, office infrastructure, and service points that support market reach and accessibility (Njenga, 2018).

Kenya's commercial banking sector is regulated by the Central Bank of Kenya (CBK), which oversees licensing, supervision, monetary policy implementation, and consumer protection. Established under the CBK Act in 1966, the institution ensures stability, transparency, and efficiency within the financial system (Kinyua, 2021; CBK, 2023). By 2023, Kenya had more than 39 regulated commercial banks that collectively supported economic development through savings mobilization, lending, investment services, and payment systems. The sector held assets exceeding KES 6.6 trillion, contributing significantly to employment creation, technological advancement, and economic growth (Ndung'u, 2022; FSD Kenya, 2023). Commercial banks in Kenya are categorized into tiers based on asset size, market share, and customer reach. Tier 1 banks, including Equity Bank, KCB Bank, NCBA, and Cooperative Bank, dominate the sector due to extensive branch networks and large asset bases. Tier 2 banks focus on specialized markets such as SMEs, while Tier 3 institutions mainly serve community-based and niche markets (Mwangi & Njiru, 2022; CBK, 2023). The Kenyan banking sector is recognized globally for innovation in mobile banking and financial inclusion. Platforms such as M-Pesa, agency banking, and digital financial services have transformed access to financial services and expanded banking opportunities among underserved populations (Jack & Suri, 2014; World Bank, 2022). However, commercial banks continue to face challenges from fintech competition, regulatory requirements, and changing consumer preferences, requiring continuous investment in organizational resources to sustain competitive advantage (Kamau, 2021).

### 1.1 Statement of the Problem

The financial environment in Nairobi City County has become increasingly competitive due to rapid technological advancements, evolving customer expectations, regulatory changes, and the growing presence of fintech firms. These developments have compelled commercial banks to strengthen their strategic capabilities to remain competitive. Despite their central role in Kenya's financial system, many commercial banks continue to experience challenges, including declining service quality, reduced market share, operational inefficiencies, inconsistent profitability, and decreasing customer satisfaction. These challenges indicate difficulties in effectively leveraging organizational resources to achieve sustainable competitive advantage.

Although some banks have recorded improved profitability and market performance, others face liquidity constraints, inefficient capital utilization, and escalating operational costs, which weaken their competitive position. Existing studies have examined aspects of organizational resources and bank performance; however, significant gaps remain. Kariuki and Muturi (2020) established that financial resources such as capital adequacy and liquidity influence bank profitability but did not assess broader dimensions of competitive advantage, including customer satisfaction and market positioning. Similarly, Achieng and Owuor (2019) highlighted the role of employee expertise and motivation in organizational performance but did not link human resource capabilities to sustainable competitive advantage. Ndungu et al. (2021) examined technological adoption and operational efficiency in Kenyan banks but focused mainly on ICT implementation rather than the combined contribution of technological, financial, human, and physical resources.

Consequently, existing literature provides limited understanding of how strategic organizational resources collectively influence competitive advantage among commercial banks in Nairobi City County. Most studies emphasize short-term financial indicators, such as return on assets and return on equity, while giving limited attention to service quality, customer satisfaction, operational effectiveness, and long-term market sustainability. This study therefore seeks to address this empirical gap by examining the influence of strategic organizational resources on the competitive advantage of commercial banks in Nairobi City County.

### 1.2 Objective of the Study

To examine the effect of strategic organizational resources on the competitive advantage of commercial banks in Nairobi City County, Kenya.

### 1.3 Research Question

What is the effect of strategic organizational resources on the competitive advantage of commercial banks in Nairobi City County, Kenya?

## 2.0 Literature Review

### 2.1 Theoretical Framework

This study is anchored on three complementary theoretical perspectives: Competitive Advantage Theory, Resource-Based View (RBV) Theory, and Diffusion of Innovations (DOI) Theory. These theories provide a framework for understanding how commercial banks utilize strategic resources, operational capabilities, and technological innovations to achieve sustainable competitive advantage. The theories explain how internal and external factors influence service quality, operational efficiency, profitability, customer satisfaction, and market positioning within the banking sector. Competitive Advantage Theory, developed by Porter (1985), explains how organizations achieve superior performance by adopting strategies that enable them to outperform competitors. Porter identified three generic strategies: cost leadership, differentiation, and focus. Cost leadership emphasizes operational efficiency and cost reduction, allowing firms to provide affordable services, while differentiation focuses on creating unique value through innovation, quality, and improved customer experiences. The focus strategy involves targeting specific market segments to meet specialized customer needs (Johnson et al., 2017; Porter, 1985).

The theory is relevant to this study because competitive advantage, the dependent variable, is measured through indicators such as service quality, market share, operational effectiveness, customer satisfaction, and profitability. In the commercial banking sector in Nairobi City County, the theory explains how banks transform strategic capabilities into superior performance. Banks that effectively align their strategies with organizational resources are better positioned to improve efficiency, enhance customer experiences, and increase profitability. Research indicates that financial institutions investing in service innovation and operational excellence strengthen their competitive position within Kenya's dynamic financial environment (Kipkoech, 2021). Cost leadership is demonstrated through initiatives such as agency banking, digital platforms, and process automation, which reduce transaction costs and expand financial accessibility. Institutions such as Equity Bank and KCB Group have adopted technology-driven strategies to enhance service delivery efficiency (CBK, 2022). Grant (2019) argues that effective cost management enables organizations to redirect savings toward innovation and growth, thereby improving competitiveness.

Similarly, differentiation strategies explain how banks achieve competitive advantage through technological advancement, personalized services, and improved customer engagement. Hill, Jones, and Schilling (2014) emphasize that differentiation becomes sustainable when integrated into organizational capabilities. Commercial banks in Nairobi City County increasingly use digital banking platforms, artificial intelligence-based customer support, and customized financial products to serve diverse customer groups, including small and medium enterprises and younger consumers (Mutua, 2023). Therefore, Competitive Advantage Theory provides a suitable foundation for examining how strategic positioning influences banking performance (Porter, 1985; Barney & Hesterly, 2019; CBK, 2022). The Resource-Based View (RBV) Theory, introduced by Wernerfelt (1984) and further developed by Barney (1991), explains how firms achieve sustained competitive advantage through effective utilization of unique internal resources. Unlike approaches that emphasize external market conditions, RBV focuses on firm-specific resources that create superior performance. Barney (1991) argues that resources that are valuable, rare, inimitable, and non-substitutable (VRIN) enable organizations to maintain long-term competitive advantages.

In this study, RBV supports the examination of financial resources, including capital adequacy, liquidity management, profitability, and strategic financial allocation, as determinants of competitive advantage among commercial banks. Financial resources enable banks to invest in innovation, manage risks, comply with regulatory requirements, and respond effectively to changing market conditions. According to Barney (2001) and Grant (2019), resources create strategic value when they are effectively organized and utilized in ways that competitors cannot easily replicate. Within the banking industry, strong financial capacity allows institutions to expand operations, invest in digital transformation, develop new products, and improve customer services. These capabilities contribute directly to operational efficiency, market share growth, and customer satisfaction. However, RBV emphasizes that possession of resources alone does not guarantee competitive advantage; rather, the strategic integration and effective management of resources determine performance outcomes (Peteraf & Barney, 2003). Newbert (2007) further highlights that resources must be aligned with organizational strategies to generate sustainable benefits. Therefore, RBV provides a strong basis for analyzing how financial strength contributes to competitive advantage among commercial banks.

Diffusion of Innovations (DOI) Theory, developed by Rogers (1962; 2003), explains how new ideas, technologies, and innovations spread within a social system over time. The theory identifies five key factors influencing adoption: relative advantage, compatibility, complexity, trialability, and observability. Rogers also categorizes adopters into innovators, early adopters, early majority, late majority, and laggards based on their readiness to embrace innovations

(Rogers, 2003; Al-Jabri & Sohail, 2019). The theory is applicable to this study because information and communication technology (ICT) resources represent an important independent variable influencing competitive advantage. Digital banking platforms, mobile banking applications, artificial intelligence services, and electronic payment systems enhance operational efficiency, customer satisfaction, and market reach when successfully adopted by employees and customers. Empirical studies support the relationship between technological adoption and competitive performance. Mtebe and Raisamo (2019) found that compatibility and trialability influence mobile financial service adoption in East Africa. Similarly, Mbogo et al. (2021) established that perceived relative advantage and observability encourage adoption of mobile banking applications in Kenya. Ondiege et al. (2020) further demonstrated that perceived ease of use and trialability influence customer acceptance of digital banking services in Nairobi. In commercial banks, innovations such as mobile banking, digital lending platforms, artificial intelligence-based services, and blockchain payment systems enhance competitiveness when effectively diffused among users. DOI therefore explains how technological capabilities move from introduction to widespread adoption, improving profitability, market positioning, and customer satisfaction. The theory provides an important framework for understanding how ICT resources contribute to sustainable competitive advantage in Kenya's banking sector (Kariuki & Mwaura, 2023; Wanjiru & Mwangi, 2022).

### 2.2 Empirical Review

An empirical review critically examines previous studies that have applied evidence-based approaches to investigate a phenomenon, with the aim of identifying research gaps, methodological trends, and emerging patterns (Saunders, Lewis, & Thornhill, 2019). Unlike theoretical discussions, empirical reviews rely on observed evidence to validate or challenge existing theories and models (Creswell & Creswell, 2023). According to Kothari and Garg (2022), empirical reviews position new studies within existing scholarly debates by synthesizing findings from quantitative, qualitative, and mixed-method research. This study reviews empirical evidence on the influence of organizational resources, namely financial resources, information communication technology (ICT), human resources, and physical assets, on competitive advantage in commercial banks. Previous studies have established that financial resources are critical determinants of competitiveness in banking. Smith, Johnson, and Williams (2017) found that technological and relational resources enhanced competitive advantage among U.S. commercial banks; however, their study gave limited attention to financial resources such as capital reserves, liquidity, profitability, and budget allocation. Khan and Ali (2019) demonstrated that effective financial resource management improved profitability and competitiveness among Pakistani commercial banks through sound liquidity management, adequate capital reserves, and proper budgeting. However, their focus was largely on profitability, leaving gaps regarding broader competitive advantage indicators such as customer satisfaction and service quality.

In Kenya, Ngugi and Wanjiku (2020) established that strong capital reserves and liquidity positions enabled commercial banks in Nairobi City County to expand operations and invest in innovation. Nevertheless, the study did not comprehensively examine profitability and budget allocation as financial resource dimensions. Similarly, Kato et al. (2019) highlighted the contribution of financial knowledge, technology, and human capital to competitiveness in Ugandan banks but did not examine financial resources as independent determinants. Mnyika et al. (2018) also emphasized the role of intangible resources and capital investment in Tanzanian banks but failed to evaluate measurable financial indicators such as liquidity ratios and capital adequacy. Kamau Karanja and Waweru (2021) focused on technology and human capital, overlooking financial determinants of competitive advantage. These gaps justify further investigation into how financial resources influence competitive advantage among commercial banks in Nairobi City County. ICT resources have increasingly become important drivers of competitiveness in the banking sector. Muda et al. (2014) found that advanced ICT infrastructure, including core banking systems, mobile banking, and internet banking platforms, enhanced operational efficiency, service quality, and cost management among Malaysian banks. Adewale and Salami (2018) similarly established that ICT investments improved customer satisfaction, reduced transaction costs, and strengthened service delivery among Nigerian commercial banks.

Within Kenya, Karanja and Waweru (2020) demonstrated that ICT infrastructure, digital payment systems, and automated customer services improved operational efficiency and market positioning among commercial banks. Ngugi and Ochieng (2018) further confirmed that mobile banking, electronic funds transfer systems, and online banking platforms increased market reach and customer satisfaction. However, existing studies have not adequately examined the interaction between ICT resources and other organizational resources in creating competitive advantage. Bharadwaj (2010) also established that superior IT capabilities contributed to improved organizational performance, although the study concentrated broadly on business performance rather than the specific competitive dynamics of Kenyan commercial banks. Human resources remain a strategic resource in achieving sustainable competitiveness.

Lado and Wilson (2019) found that employee development, performance management, and leadership programmes improved profitability and market positioning among U.S. banks. Bassanini and Vuk (2020) similarly established that strategically aligned human resource practices enhanced employee productivity, service quality, and competitiveness among European commercial banks.

Studies within Kenya provide similar evidence. Wanjiku and Omondi (2021) found that training, employee motivation, and performance management improved operational efficiency and competitiveness among Nairobi commercial banks. Tariq et al. (2019) reported that employee development, motivation, and performance practices enhanced customer service efficiency in Pakistani banks. Zhang and Liu (2020) further emphasized the importance of leadership development, employee engagement, and recruitment strategies in strengthening competitive advantage among Chinese commercial banks. In Kenya, Okello and Ochieng (2021) demonstrated that staff development, performance monitoring, and employee welfare contributed to competitive advantage among leading banks. However, limited attention has been given to how human resource practices interact with technological transformation in modern banking environments. Physical assets such as branches, ATMs, and banking infrastructure contribute significantly to customer accessibility and service delivery. Abdullahi and Yahaya (2020) established that branch networks, ATMs, and physical facilities improved customer retention and competitiveness among Nigerian banks. Okeke and Chukwu (2019) similarly found that branch location, office facilities, and ATM availability enhanced customer satisfaction and market coverage among Ghanaian commercial banks.

In Kenya, Wanjala and Mwangi (2021) demonstrated that strategically positioned branches, ATMs, and offices improved customer access, satisfaction, and loyalty among Nairobi commercial banks. Kiptum and Kipchumba (2018) confirmed that physical resources influenced perceived service quality and customer satisfaction. Mutua and Muriithi (2019) further established that branch networks, security systems, and infrastructure investments enhanced customer confidence and operational reliability. However, these studies paid limited attention to the integration of physical resources with digital banking technologies. The current study addresses this gap by examining how combined organizational resources contribute to competitive advantage among commercial banks in Nairobi City County.

### 2.3 Conceptual Framework

A conceptual framework provides a structured representation of the relationships among study variables, guiding hypothesis development, research questions, and analytical approaches (Miles & Huberman, 1994; Creswell, 2023). The framework illustrates how strategic assets, including financial resources, ICT capabilities, human resources, and physical infrastructure, influence competitive advantage in the banking sector. These independent variables enable banks to enhance innovation, service efficiency, customer satisfaction, and operational effectiveness. Investments in skilled employees, technological systems, branch networks, and digital platforms strengthen service delivery, customer loyalty, and market competitiveness. Consequently, these strategic resources contribute to improved organizational outcomes, including increased market share, operational efficiency, and profitability. The framework therefore demonstrates how internal capabilities serve as critical drivers of sustainable competitive advantage within a dynamic financial environment.

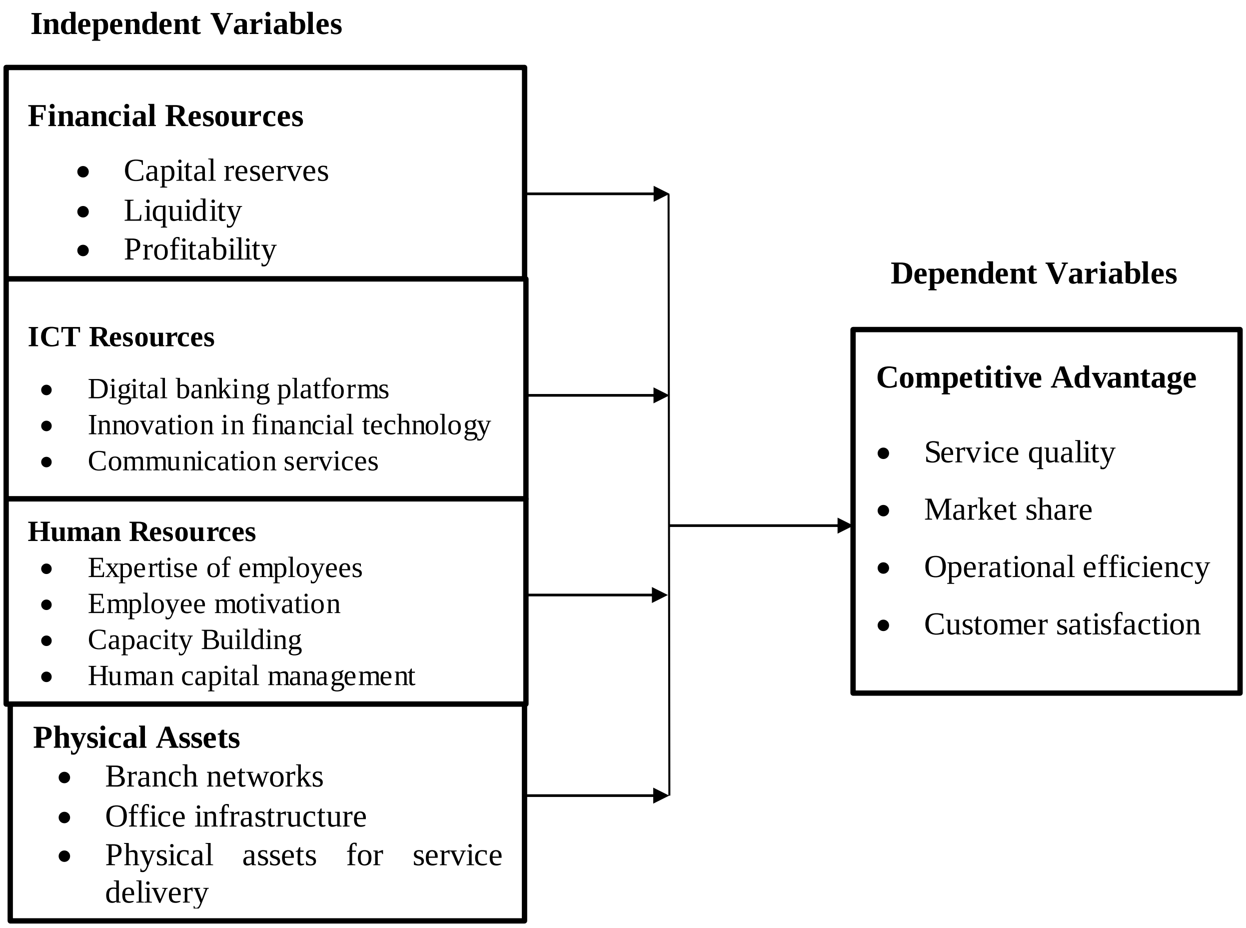


**Figure 1: Conceptual Framework**

### 3.0 Methodology

The study adopted a descriptive research design to examine the relationship between organizational resources and competitive advantage among commercial banks. The design was suitable because it enabled the researcher to investigate existing conditions, practices, perceptions, and relationships without manipulating variables. It facilitated the collection and analysis of both quantitative and qualitative data on financial resources, ICT resources, human resources, and physical assets within their natural organizational contexts. According to Creswell (2023), descriptive research is appropriate for examining phenomena as they occur naturally and identifying patterns and relationships among variables. The target population comprised 150 management-level employees from selected commercial banks. Kothari (2004) defines a target population as the complete group of individuals or elements to which research findings are generalized. The respondents included senior managers, departmental heads, and operational supervisors who were directly involved in resource allocation, strategic planning, and decision-making processes. A census approach was employed because the population was manageable, allowing all 150 respondents to participate. This enhanced representation, minimized sampling errors, and captured perspectives from finance, ICT, human resources, and operations departments.

Data were collected using structured questionnaires containing both closed-ended and open-ended questions. The instrument was organized around the study variables to assess the contribution of different organizational resources to competitive advantage. Validity was enhanced through expert review, pilot testing involving ten respondents outside the study sample, and alignment of questionnaire items with the conceptual framework. Reliability was assessed using Cronbach's alpha, with a coefficient of 0.7 and above considered acceptable for internal consistency.

Data collection involved obtaining authorization from Kenyatta University and research clearance from NACOSTI before engaging selected commercial banks. Questionnaires were administered physically and electronically, while interviews and secondary sources, including bank reports and publications from the Central Bank of Kenya, supplemented primary data. Quantitative data were analyzed using SPSS version 28 through descriptive statistics and multiple regression analysis. The regression model applied was:

$$Y=\beta 0+\beta 1X1+\beta 2X2+\beta 3X3+\beta 4X4+\varepsilon$$

where Y represented competitive advantage, while X1, X2, X3, and X4 represented financial resources, ICT resources, human resources, and physical assets, respectively. Qualitative data were analyzed through thematic content analysis to identify recurring patterns and strategic practices. Findings were presented using tables, charts, and narrative explanations to integrate quantitative and qualitative insights. Ethical standards were maintained throughout the study. Approval was obtained from relevant institutions, including NACOSTI and KUERC. Participants provided informed consent, confidentiality was assured, and participation remained voluntary, with respondents retaining the right to withdraw at any stage.

## 4.0 Findings and Discussion

The study targeted 150 management-level employees in Nairobi City County, Kenya, using a census approach. A total of 130 questionnaires were successfully completed and returned, representing an 86.67% response rate, while 20 questionnaires were not returned. According to Mugenda and Mugenda (2003), response rates above 70% are considered exceptional, indicating that the collected data was adequate, reliable, and representative of management perspectives on strategic resource utilization in commercial banks.

### 4.1 Correlation Analysis

Pearson correlation analysis was conducted to establish the relationship between strategic organizational resources and competitive advantage among commercial banks in Nairobi City County. The results in Table 1 indicate that all organizational resources had positive and statistically significant relationships with competitive advantage at the 0.01 significance level.

**Table 1: Correlation Analysis**

| Variable | Financial Resources | ICT Resources | Human Resources | Physical Assets | Competitive Advantage |
|---|---|---|---|---|---|
| Financial Resources | 1 | .612** | .585** | .528** | .674** |
| ICT Resources | .612** | 1 | .598** | .560** | .701** |
| Human Resources | .585** | .598** | 1 | .493** | .689** |
| Physical Assets | .528** | .560** | .493** | 1 | .652** |
| Competitive Advantage | .674** | .701** | .689** | .652** | 1 |

The correlation results showed positive and statistically significant relationships between each resource dimension and competitive advantage. ICT resources had the strongest association ($r = 0.701$, $p < 0.01$), followed by human resources ($r = 0.689$, $p < 0.01$), financial resources ($r = 0.674$, $p < 0.01$), and physical assets ($r = 0.652$, $p < 0.01$). Correlations among the independent variables were moderate, indicating that the resource dimensions were related but empirically distinguishable.

### 4.2 Regression Analysis

Regression analysis was conducted to determine the extent to which financial resources, ICT resources, human resources, and physical assets predict competitive advantage. The analysis examined the contribution of each resource category to variations in service quality, operational efficiency, market share, and customer satisfaction.

**Table 2: Regression Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0.742 | 0.550 | 0.534 | 0.421 |

Predictors (Constant): Financial Resources, ICT Resources, Human Resources, Physical Assets

Source: Researcher (2026)

The model explained 55.0% of the variance in competitive advantage ($R^2 = 0.550$; adjusted $R^2 = 0.534$). This indicates that financial, ICT, human, and physical resources jointly accounted for a substantial proportion of variation in competitive advantage, while the remaining variation was attributable to factors outside the model.

**Table 3: Analysis of Variance**

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 25.280 | 4 | 6.320 | 28.148 | .000[b] |
| Residual | 23.800 | 125 | .225 | | |
| Total | 49.080 | 129 | | | |

The ANOVA results indicated that the overall regression model was statistically significant. The regression model was significant ($F=28.148$, $p<0.05$), indicating that financial resources, ICT resources, human resources, and physical assets jointly predicted competitive advantage. The findings confirm that organizational resources are important predictors of competitive positioning within the banking sector. These results align with Ngugi and Wanjiku (2020), who highlighted the role of financial resources in improving market responsiveness, and Karanja and Waweru (2020), who emphasized that ICT resources enhance customer satisfaction and competitiveness through digital innovation.

**Table 4: Regression Coefficients**

| Model | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|
| Constant | 1.420 | 0.241 | | 5.897 | .000 |
| Financial Resources | 0.198 | 0.061 | 0.287 | 3.220 | .002 |
| ICT Resources | 0.238 | 0.060 | 0.314 | 3.961 | .000 |
| Human Resources | 0.060 | 0.059 | 0.091 | 1.008 | .316 |
| Physical Assets | 0.183 | 0.068 | 0.223 | 2.692 | .008 |

The regression equation was:

$$Y = 1.420 + 0.198X_1 + 0.238X_2 + 0.060X_3 + 0.183X_4$$

where Y represents competitive advantage, $X_1$ represents financial resources, $X_2$ represents ICT resources, $X_3$ represents human resources, and $X_4$ represents physical assets.

ICT resources were the strongest significant predictor of competitive advantage ($B = 0.238$, $\beta = 0.314$, $t = 3.961$, $p < 0.001$). Holding the other predictors constant, a one-unit increase in ICT resources was associated with a 0.238-unit increase in competitive advantage. This result is consistent with studies emphasizing the strategic role of digital infrastructure and banking technology in operational efficiency and market competitiveness (Muda et al., 2014; Adewale & Salami, 2018; Karanja & Waweru, 2020). Financial resources were also a significant predictor of competitive advantage ($B = 0.198$, $\beta = 0.287$, $t = 3.220$, $p = 0.002$). The finding indicates that stronger financial capacity supports the strategic investments required for innovation, expansion, risk management, and service improvement, consistent with Ngugi and Wanjiku (2020) and Khan and Ali (2019).

Physical assets had a positive and significant effect on competitive advantage (B = 0.183, β = 0.223, t = 2.692, $p = 0.008$). The result suggests that branches, ATMs, and related physical infrastructure continue to support customer access and service delivery even as banks expand digital channels (Abdullahi & Yahaya, 2020; Wanjala & Mwangi, 2021). Human resources had a positive but statistically non-significant effect on competitive advantage (B = 0.060, β = 0.091, t = 1.008, $p = 0.316$). Although human resources were strongly correlated with competitive advantage at the bivariate level, their unique contribution was not significant after controlling for the other resource dimensions. This suggests that human capital may operate alongside complementary financial and technological resources rather than as an independent predictor in the estimated model.

### 4.5 Discussion of Findings

The findings show that strategic organizational resources collectively contribute to competitive advantage among commercial banks in Nairobi City County ($R^2 = 0.550$). ICT resources produced the strongest unique effect (β = 0.314, $p < 0.001$), followed by financial resources (β = 0.287, $p = 0.002$) and physical assets (β = 0.223, $p = 0.008$), while human resources did not have a statistically significant unique effect (β = 0.091, $p = 0.316$). The pattern supports the Resource-Based View by showing that competitiveness is associated with the configuration and deployment of complementary organizational resources rather than resource possession alone.

## 5.0 Conclusion

The study concludes that strategic organizational resources are associated with competitive advantage among commercial banks in Nairobi City County. ICT, financial, and physical resources were significant predictors in the estimated model, whereas human resources were not statistically significant after controlling for the other resource dimensions. The findings underscore the importance of coordinating financial capacity, digital capability, human expertise, and physical infrastructure within a coherent resource strategy.

## 6.0 Recommendations

i. Commercial banks should strengthen financial planning, liquidity management, capital adequacy, and strategic budget allocation to support sustained investment and market responsiveness.

ii. Banks should prioritize ICT investment in secure digital banking platforms, data analytics, cybersecurity, and fintech capabilities to strengthen service efficiency and customer experience.

iii. Human resource development should focus on digital competencies, performance management, and the integration of employee capabilities with emerging banking technologies.

iv. Banks should integrate strategically located physical infrastructure with digital channels to provide an effective hybrid service model for diverse customer segments.

v. Future studies should examine additional strategic factors, including organizational culture, leadership, innovation capability, and customer relationship management, using longitudinal and comparative designs.

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