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**EFFECT OF BUSINESS CONTINUITY PLANNING ON THE RESILIENCE
OF TIER-ONE COMMERCIAL BANKS IN KENYA**

**Riziki Anyango Oluoch, Dr. Julius Kahuthia Mwangi, PhD and Dr. Eunice
Wandiga, PhD**



Effect of Business Continuity Planning On the Resilience of Tier-One Commercial Banks in Kenya

Riziki Anyango Oluoch

*Corresponding Author, School of Business
and Leadership Studies, St. Paul's
University*

Dr. Julius Kahuthia Mwangi, PhD

*Department of Business, St. Paul's
University*

Dr. Eunice Wandiga, PhD

*Department of Business, St. Paul's
University*

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Abstract:

Purpose of Study: This study analyzed the effect of business continuity planning on the resilience of tier-one commercial banks in Kenya. It sought to establish how continuity planning practices contribute to operational stability, recovery capacity, and the ability of banks to withstand disruptions while maintaining essential services and sustaining competitiveness in a dynamic banking environment.

Methodology: The study adopted a descriptive research design guided by contingency theory and dynamic capabilities theory. The target population comprised 324 employees from nine tier-one commercial banks in Kenya. A sample of

179 respondents was selected using multistage sampling. Data were collected through structured questionnaires, with 163 responses received, representing a 91.1% response rate. Analysis involved descriptive statistics, Pearson correlation, and regression using SPSS.

Findings: The findings revealed that business continuity planning had a strong, positive, and statistically significant relationship with resilience ($r = 0.615$, $p < 0.05$). Regression analysis further established a positive and significant effect of business continuity planning on resilience ($\beta = 0.312$, $t = 5.115$, $p < 0.001$). However, business continuity planning practices were moderately implemented, with an overall mean of 2.98. Feedback collection from business continuity drills recorded the lowest mean (2.88), while frequent risk assessment reviews recorded the highest (3.09). Resilience was also moderate, with an overall mean of 3.03. These findings indicate that although continuity planning enhances resilience, inconsistencies in implementation, alternative banking channels, risk assessments, and learning mechanisms constrain its effectiveness.

Conclusion: The study concluded that business continuity planning significantly improves the resilience of tier-one commercial banks in Kenya. However, inconsistent implementation limits its full potential. Banks should institutionalize regular continuity drills, strengthen alternative banking channels, conduct proactive risk assessments, and systematically incorporate feedback into future planning to enhance operational continuity, recovery capacity, and long-term institutional resilience.

Keywords: Business Continuity Planning, Resilience, Tier-One Commercial Banks, Alternative Banking Channels, Risk Assessment Reviews.

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1. INTRODUCTION

At the global level, business continuity planning has moved from being a technical back-up function to a strategic instrument through which organizations protect their critical operations against increasingly frequent and complex disruptions. Business continuity planning refers to the strategies and actions an organization takes so that its essential functions continue during and after a disaster or disruption (Micheni et al., 2025). A well-developed business continuity plan outlines the procedures for keeping key operations running regardless of the type or scale of the disruption, with the aim of preventing downtime, keeping essential services available, and facilitating quick recovery (Galaitis et al. (2023); Eeten, 2020; Kesa, 2023). Resilience, on the other hand, is the ability of an organization to absorb, adapt to, and recover from adverse events (UNDRR, 2021). Duchek (2020) argues that organizations become resilient when they are able to anticipate, cope with, and adapt to disruptions, which places continuity planning at the centre of long-term organizational survival.

The relationship between continuity planning and resilience is particularly vital in the banking sector because of its extensive exposure to financial, operational, and reputational risks. The Basel Committee on Banking Supervision (2021) now regards robust continuity and operational resilience arrangements as a crucial component of enterprise risk management that is integral to institutional stability. The collapse of Silicon Valley Bank in the United States during the 2023 liquidity crisis illustrated how a single event can trigger systemic failure where strategic preparedness for disruption is lacking (Federal Reserve, 2023). In India, the Reserve Bank of India mandated banks to develop information technology disaster recovery and cyber-resilience policies following increased threats to data infrastructure (Reserve Bank of India, 2022).

Global corporations have also demonstrated how structured continuity arrangements support resilience. Microsoft, for instance, operates a central Emergency Operations Center through which it manages cyber threats, health emergencies, and supply chain risks in a coordinated manner (Microsoft, 2023). The COVID-19 pandemic further tested continuity arrangements across the world, causing global economic contractions and disrupting supply chains and service delivery (World Health Organization, 2020). These experiences reinforced the view that continuity planning is not merely about documenting procedures but about building the capacity to keep operating when normal conditions collapse (Steen et al., 2024).

At the continental level, African organizations have increasingly recognized the need for structured continuity arrangements in the face of pandemics, natural disasters, and technological disruptions. During the COVID-19 pandemic, MTN Group launched its Crisis Command Centre to provide real-time support across more than 20 countries, ensuring seamless operations amid the global crisis (MTN Group, 2020). In the financial sector, African regulators have strengthened expectations on operational continuity. The Central Bank of Nigeria (2021), for example, introduced a risk-based cybersecurity framework requiring deposit money banks to put in place measures that safeguard the continuity of their critical systems. Haile et al. (2025) note that regulatory convergence has shaped banking resilience in Africa, while Obadire (2022) shows that banking regulation influences the stability of African banks, suggesting that

continuity requirements are becoming an important part of prudential supervision on the continent.

Locally, Kenyan firms have invested in continuity arrangements to keep services running during periods of uncertainty. Safaricom, for instance, enhanced its resilience through digitized payment systems such as M-PESA and cloud-based data backups, which ensured service continuity during disruptions. The Central Bank of Kenya groups banks into tiers based on a weighted market share index that considers net assets, deposits, capital, and the number of deposit and loan accounts. Banks with an index above 5 per cent are classified as Tier I and regarded as large banks, those between 1 and 5 per cent as Tier II, and those below 1 per cent as Tier III (Central Bank of Kenya, 2023).

According to the Central Bank of Kenya (2023), nine banks were listed as Tier I by December 2023, namely Kenya Commercial Bank, Equity Bank, NCBA Bank, Co-operative Bank of Kenya, Absa Bank Kenya, Standard Chartered Bank Kenya, Stanbic Bank, I&M Bank, and Diamond Trust Bank. These banks account for the largest share of banking assets, deposits, and employees in the country, and their ability to withstand disruptions is therefore central to the stability of Kenya's financial system.

Locally, resilience in banks is reflected in their ability to maintain customer service continuity, sustain profitability, and preserve market share after a disruption, as well as in the effectiveness of crisis management, operational flexibility, redundancy of resources, and recovery time (Haile et al., 2025). Business continuity planning contributes to these outcomes by ensuring that BCP drills reflect emerging risks, that alternative banking channels are available when primary systems fail, and that risk assessments are conducted frequently enough to detect and prepare for potential disruptions.

1.1 Statement of The Problem

In the dynamic banking sector of Kenya, business continuity planning plays a vital role in strengthening the resilience of financial institutions, particularly tier-one commercial banks. Continuity arrangements ensure that banks are prepared to handle operational disruptions, cyber-attacks, system outages, and other crises without compromising their ability to continue serving customers (Obadire, 2022). Tier-one banks are expected to have robust continuity frameworks that enable them to withstand external shocks, minimize downtime, and maintain customer confidence (Kenya Bankers Association, 2022).

However, despite progress in risk management, many tier-one banks continue to face substantial challenges, including outdated disaster recovery plans and inadequate cybersecurity measures. According to the Central Bank of Kenya (2021), 60% of tier-one banks still struggle with inadequate implementation of disaster preparedness and continuity strategies. This vulnerability was evident in past incidents involving Imperial Bank Limited and Chase Bank, both of which were placed under receivership following poor risk management and weak preparedness (Central Bank of Kenya, 2023). In addition, a 2023 survey by the Central Bank of Kenya revealed that 97% of commercial banks identified cybersecurity as a top innovation-related risk, while 82% cited third-party and vendor management risks as significant concerns.

These challenges point to weaknesses in the arrangements that banks rely on to keep critical operations running during disruptions.

The COVID-19 pandemic further exposed the vulnerabilities within the banking sector, with many banks struggling to adapt to sudden disruptions (World Bank, 2020). This problem affects several stakeholders. Without effective continuity planning, banks risk financial losses, customer distrust, and regulatory scrutiny, which affect their long-term viability and growth. Customers face service disruptions and delayed transactions, while regulators such as the Central Bank of Kenya must ensure that banks maintain workable continuity protocols to preserve the stability of the banking system.

Several studies have explored the role of business continuity planning in organizational resilience. Steen et al. (2024) emphasized that business continuity is crucial for minimizing the impact of disruptions on operations, while Corrales-Estrada et al. (2021) linked resilience capabilities to stronger business continuity management. However, these studies were conceptual or based on literature reviews, while others such as De Matteis et al. (2023), Riglietti et al. (2021), and Elshaer and Saad (2022) focused on small and medium enterprises, supply chains, and tourism firms in Europe and Egypt. There is therefore limited empirical evidence on how business continuity planning affects the resilience of large commercial banks operating in Kenya. This study sought to bridge this gap by analyzing the effect of business continuity planning on the resilience of tier-one commercial banks in Kenya.

1.2 Objective of The Study

The study sought to analyze the effect of business continuity planning on the resilience of tier-one commercial banks in Kenya.

2. LITERATURE REVIEW

2.1 THEORETICAL FRAMEWORK

2.1.1 Contingency Theory (Woodward, 1958)

Contingency theory was first introduced by Woodward (1958), who argued that no single management approach works best in all situations. Lawrence and Lorsch (1967) later expanded on this idea, emphasizing that different organizations require different structures depending on the level of uncertainty in their external environment. They argued that organizations must align their internal processes with external factors in order to remain effective and competitive. The key contingencies include the external environment, such as economic conditions, technological advancements, and regulatory requirements, as well as the technology and size of the organization.

Several scholars have contributed to the development of contingency theory. Burns and Stalker (1961) distinguished between mechanistic and organic structures, explaining that organizations operating in stable environments function best with rigid and hierarchical structures, while those in dynamic environments require flexible and decentralized structures. Donaldson (2001) refined the theory by suggesting that organizations should align their strategy, structure, and management practices with external contingencies for optimal performance. Despite these

contributions, the theory has faced criticism. Child (1972) argued that it underestimates managerial choice by assuming that organizations passively adapt to external conditions rather than proactively shaping them, Senge (1990) criticized its limited emphasis on organizational learning.

Contingency theory is relevant to this study because tier-one commercial banks operate in dynamic and uncertain environments characterized by cyber threats, system outages, pandemics, regulatory changes, and market shocks. The theory supports the argument that banks must align their business continuity planning with the specific risks and uncertainties they face. Under this view, continuity plans cannot be static documents; BCP drills must be updated to reflect new risks, alternative banking channels must match the likely forms of disruption, and risk assessment reviews must be frequent enough to capture changes in the operating environment. Banks whose continuity arrangements fit their risk environment are therefore expected to be more resilient than those whose arrangements lag behind emerging threats.

2.1.2 Dynamic Capabilities Theory (Teece, Pisano & Shuen, 1997)

Dynamic capabilities theory, advanced by Teece, Pisano and Shuen (1997), explains how firms remain competitive by continuously adjusting their resources and competencies to fit changing business conditions. The theory argues that organizational success does not depend only on owning valuable resources, but also on the ability to reshape, combine, and renew those resources when markets become uncertain or disruptive. Firms operating in unstable environments must therefore build flexible capabilities that enable them to sense change, respond effectively, and sustain their advantage over time (Teece, 2007). The theory comprises sensing capabilities that detect threats and opportunities, seizing capabilities that mobilize decisions and resources in response, and reconfiguring capabilities that renew resources and processes as the environment changes.

Eisenhardt and Martin (2000) emphasized that dynamic capabilities consist of specific routines and processes that firms use to adapt to change and mitigate risks, especially where technological change is rapid. However, the theory has also been criticized. Winter (2003) noted that its concepts are vague and difficult to operationalize, arguing that while dynamic capabilities are vital, it is unclear how they can be developed systematically. Zollo and Winter (2002) further argued that the theory does not adequately address the role of external factors in shaping a firm's response to crises, and they proposed deliberate learning as the mechanism through which such capabilities evolve.

Despite these criticisms, dynamic capabilities theory is relevant to this study because business continuity planning represents a set of routines through which banks sense, respond to, and recover from disruptions. Proactive risk assessment reviews reflect the sensing capability that allows banks to detect potential operational disruptions early. Activating alternative banking channels during outages reflects the seizing capability that keeps services available to customers. Collecting feedback from BCP drills and using it to improve future planning reflects the reconfiguring and learning capability emphasized by Zollo and Winter (2002). The theory

therefore explains why banks that treat continuity planning as a continuously renewed capability, rather than a one-off compliance exercise, are expected to achieve higher resilience.

2.2 Empirical Review

2.2.1 Business Continuity Planning and Organizational Resilience

In Europe, a conceptual study by Steen, Haug and Patriarca (2024) explored business continuity and resilience management with the aim of developing a holistic resilience framework applicable across industries. Using a qualitative approach that synthesized existing models, the study identified organizational adaptability, crisis response, and continuous improvement as key dimensions influencing resilience. According to the authors, resilience is not only about recovery but also about proactive preparation and learning from past disruptions. Being conceptual, however, the study lacked empirical validation.

Through a systematic literature review, Corrales-Estrada et al. (2021) examined how sustainability and resilience capabilities enhance business continuity management. The review analyzed the interdependence between sustainability practices and resilience strategies and found that organizations with strong sustainability initiatives are more resilient to disruptions, as they integrate risk management with long-term business strategies. As a review of existing literature, the study did not provide primary empirical evidence to support the proposed relationships.

Also in Europe, Moşteanu (2024) discussed strategies for building business resilience amid unpredictable disruptions. Using expert interviews and secondary data, the study analyzed resilience-building strategies across multiple industries and concluded that businesses must adopt a dynamic approach to resilience that incorporates flexibility, digital transformation, and proactive risk assessment. The study, however, focused primarily on European firms, which limits the generalizability of its findings to Kenyan banks operating under different regulatory and market conditions.

2.2.2 Business Continuity Planning, Disaster Recovery and Operational Continuity

In Latin America, Kesa (2023) investigated the integration of information technology disaster recovery planning and business continuity for sustainable operations. Employing a case study approach that targeted the technology departments of large corporations, the study analyzed how disaster recovery plans contribute to business resilience. The findings highlighted that organizations with well-structured disaster recovery plans experience less downtime and lower financial losses during disruptions. The study was limited in scope because it focused on technology operations rather than the full range of continuity arrangements in an institution, and it was conducted in Latin America, which limits its applicability to Kenya.

Quantitative evidence from Europe was provided by Riglietti, Avatefipour and Trucco (2021), who measured the impact of business continuity management on supply chain resilience. The study used statistical modelling and surveyed 300 supply chain managers across different sectors. The results revealed that well-structured business continuity plans significantly enhance supply chain resilience by reducing vulnerabilities and ensuring rapid recovery. While the study offers empirical support for the link between continuity planning and resilience, it

was conducted in Europe and within supply chains, leaving a geographical and sectoral gap with regard to commercial banks in Kenya.

With specific reference to financial institutions, Galaitsi et al. (2023) and van Eeten (2020) examined the role of business continuity planning in organizational resilience and observed that business continuity planning aims to prevent downtime, ensure that essential services remain available, and facilitate quick recovery after disruption. The study highlighted that continuity plans must be tested and updated if they are to function when a crisis occurs. Similarly, the Basel Committee on Banking Supervision (2021) set out principles for operational resilience that require banks to identify critical operations, map their interdependencies, and test their ability to deliver those operations through severe but plausible disruptions. These sources show that continuity planning in banks is expected to be practical, tested, and continuously improved.

2.2.3 Business Continuity Planning and Resilience in Emerging and Resource-Constrained Contexts

In Italy, a survey by De Matteis, Elia and Del Vecchio (2023) explored business continuity management and resilience from the perspective of small and medium enterprises. The study sampled 250 SME managers across various industries and assessed how they implement resilience strategies. The findings showed that SMEs face greater challenges in business continuity management because of limited financial and human resources, making agility and adaptability crucial for their survival. Since the study focused on SMEs in Italy, its findings may not be generalized to large, highly regulated commercial banks such as tier-one banks in Kenya.

In the tourism and hospitality industry in Egypt, Elshaer and Saad (2022) examined the relationship between entrepreneurial resilience and business continuity. Using a mixed-methods approach that included surveys and interviews with 150 entrepreneurs, the study found that adaptive performance and institutional orientation play a crucial role in ensuring business continuity during crises. Its focus on tourism entrepreneurs in Egypt, however, leaves a contextual gap in relation to Kenyan banks.

Taken together, the reviewed studies show that business continuity planning is widely associated with improved resilience through reduced downtime, faster recovery, and proactive preparation. However, much of this evidence is conceptual (Steen et al., 2024), based on literature reviews (Corrales-Estrada et al., 2021), or drawn from SMEs, supply chains, technology departments, and tourism firms outside Kenya (De Matteis et al., 2023; Elshaer & Saad, 2022; Kesa, 2023; Riglietti et al., 2021). Empirical evidence on the effect of business continuity planning on the resilience of large commercial banks in Kenya therefore remains limited, and this is the gap that the present study sought to address.

2.4 CONCEPTUAL FRAMEWORK

The conceptual framework for this study illustrated the relationship between business continuity planning and the resilience of tier-one commercial banks in Kenya. Business continuity planning was the independent variable and was operationalized through the effectiveness of BCP drills, the availability of alternative banking channels, and the frequency

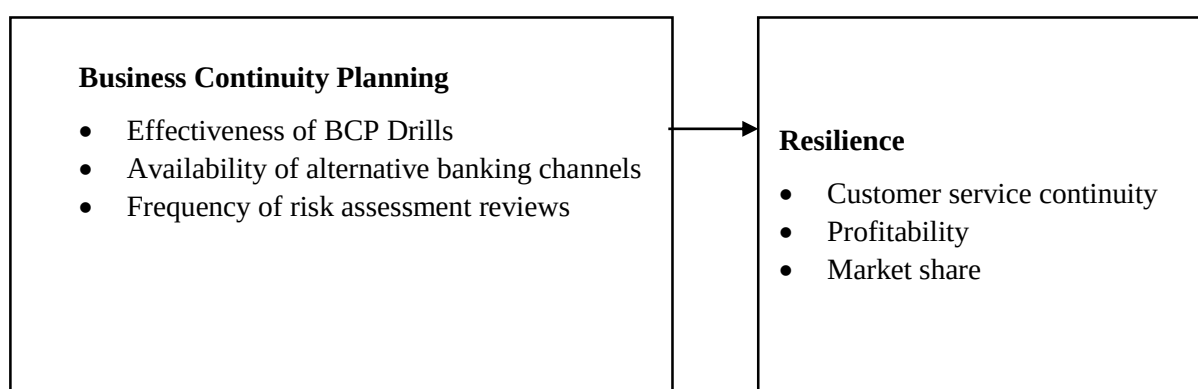
of risk assessment reviews. The dependent variable was the resilience of tier-one commercial banks, conceptualized as the ability of a bank to withstand economic, operational, or environmental disruptions while maintaining its functions and returning to normal operations as quickly as possible (Haile et al., 2025). Resilience was measured through customer service continuity, profitability, and market share. Figure 1 shows the conceptual framework.

Figure 1

Conceptual Framework

Independent Variable

Dependent Variable



Note. Source: Researcher, 2025

3. METHODOLOGY

The study adopted a descriptive research design, which enabled the collection and analysis of numerical data to establish the link between business continuity planning and the resilience of tier-one commercial banks in Kenya. The descriptive design was appropriate because the study gathered information from respondents at a single point in time and analyzed it to assess the influence of business continuity planning on resilience. The study focused on the nine tier-one commercial banks identified by the Central Bank of Kenya (2023), and the geographical scope was limited to Nairobi County, where the head offices of these banks are located. The banks served as the unit of analysis, while employees were the unit of observation.

The target population consisted of 324 employees drawn from the nine tier-one commercial banks. From each bank, the study targeted senior managers (27), business continuity staff (81), financial officers (81), information management staff (81), and human resource staff (54). These groups were selected because they are directly involved in continuity and operational functions within their institutions. The sample size was determined using the Yamane (1967) formula, $n = N / (1 + N(e)^2)$, with a margin of error of 0.05, which yielded a sample of 179

respondents. Multistage sampling was used, first stratifying respondents by bank and then by functional area, to enhance the representativeness of the sample while maintaining cost-effectiveness in reaching a dispersed population of employees (Rahman et al., 2022).

The study relied on primary data collected through a structured questionnaire, which is well suited for survey studies because it is cost-effective, allows anonymity, and encourages honest responses. Business continuity planning was measured using six statements on a five-point Likert scale, where 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree, and 5 = strongly agree. Resilience was measured using six statements on the same scale. The questionnaire was administered through Google Forms over approximately three weeks, and data was analyzed using the Statistical Package for Social Sciences. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize respondents' views (Sallis et al., 2021), while inferential analysis involved Pearson correlation and regression analysis to establish the relationship between business continuity planning and resilience.

A pilot study involving 17 respondents, representing 10% of the sample as recommended by Taherdoost (2022), was conducted at Family Bank, a Tier II bank, in order to preserve the integrity of the target population. Content validity was established through expert review by research supervisors at St. Paul's University, while construct validity was assessed using a factor loading cut-off of 0.5 as suggested by Hair et al. (2019). Reliability was assessed using Cronbach's alpha, with a coefficient of 0.7 and above considered acceptable. Ethical clearance was obtained from the Institutional Scientific and Ethics Review Committee of St. Paul's University, and a research permit was obtained from the National Commission for Science, Technology and Innovation. Participation was voluntary, informed consent was obtained, and no personal identifiers were collected, so that individual respondents and banks could not be traced from the data.

4. FINDINGS AND DISCUSSION

The study targeted 179 employees drawn from senior management, business continuity, financial management, information management, and human resource departments across the nine tier-one commercial banks in Kenya. Out of the 179 questionnaires administered, 163 were duly completed and returned, while 16 were not returned, representing a response rate of 91.1%. A response rate above 70% is considered very good for organizational research, making the response rate achieved adequate for analysis.

Demographic results revealed an almost balanced gender distribution, with 83 males (50.9%) and 80 females (49.1%). In terms of academic qualifications, 39 respondents (23.9%) held master's degrees, 33 (20.2%) held certificates, 33 (20.2%) held other professional qualifications, 31 (19.0%) held diplomas, and 27 (16.6%) held undergraduate degrees. Regarding work experience, 44 respondents (27.0%) had served for between 10 and 15 years, 40 (24.5%) for between 3 and 9 years, 40 (24.5%) for less than 3 years, and 39 (23.9%) for more than 15 years. Concerning institutional roles, financial officers constituted the largest group (27.0%), followed by human resource staff (20.9%), information management staff (20.2%), business continuity staff (17.8%), and senior managers (14.1%). The findings indicate

that the study engaged a qualified, experienced, and functionally diverse group of respondents, including decision-makers and technical staff directly involved in business continuity planning.

4.1 Descriptive Statistics on Business Continuity Planning

The objective of the study was to analyze the effect of business continuity planning on the resilience of tier-one commercial banks in Kenya. Respondents were asked to indicate their level of agreement with statements on whether BCP drills are regularly updated to reflect emerging risks, whether sufficient alternative banking channels are available during system disruptions, whether regular and proactive risk assessment reviews are conducted, and whether employees are well informed about structured preparedness processes during BCP events. Additional items examined the frequency of risk assessment reviews in evaluating the effectiveness of BCP strategies and whether feedback from BCP drills is consistently collected and used to improve future planning. The findings are presented in Table 1.

Table 1

Descriptive Statistics on Business Continuity Planning

Statement	Mean	Std. Dev.
This bank's BCP drills are regularly updated to reflect new challenges and risks.	3.05	1.45
This bank ensures the availability of sufficient alternative banking channels in case of system outages or disruptions.	2.95	1.38
This bank conducts regular and proactive risk assessment reviews to identify potential operational disruptions.	2.91	1.49
We are well-informed about the bank's structured process for ensuring preparedness during BCP events.	2.99	1.40
This bank conducts risk assessment reviews frequently to evaluate the effectiveness of the bank's BCP strategy.	3.09	1.47
This bank collects feedback from BCP drills consistently and uses it to improve future planning.	2.88	1.41
Overall	2.98	1.43

Note. Source: Field Data (2026).

Table 1 shows that business continuity planning practices within tier-one commercial banks in Kenya were perceived to be moderate but not strongly established. The overall mean score was 2.98 with a standard deviation of 1.43, suggesting that respondents generally held neutral to slightly low perceptions of the effectiveness of business continuity planning in their institutions. The overall standard deviation, which was well above 1.0, points to wide variation in views, meaning that experiences with BCP practices were not uniform across the sampled banks. Although some institutions may have relatively structured continuity mechanisms, others appear to have weaknesses in updating drills, strengthening preparedness procedures, and applying feedback from continuity exercises.

The statement that the bank's BCP drills are regularly updated to reflect new challenges and risks recorded a mean of 3.05 and a standard deviation of 1.45. The mean is slightly above the

midpoint of the scale, suggesting that respondents only moderately agreed that BCP drills are reviewed and adjusted in response to emerging risks. The distribution of responses confirms this divided view, with 39.2% of respondents agreeing that drills are regularly updated and 38.6% disagreeing. This suggests that while some tier-one banks revise their continuity frameworks as new risks emerge, others do not do so consistently.

The availability of sufficient alternative banking channels during system outages or disruptions had a mean of 2.95 and a standard deviation of 1.38. The mean falls below the midpoint, indicating that respondents were not convinced that their banks had adequate alternative channels to sustain service delivery during disruptions. Only 36.8% of respondents agreed with the statement, while 44.8% disagreed. This suggests that alternative channels such as digital platforms, backup systems, agency banking, and mobile banking may not be equally reliable across all tier-one banks.

The statement on whether banks conduct regular and proactive risk assessment reviews to identify potential operational disruptions recorded a mean of 2.91 and a standard deviation of 1.49, which was the highest standard deviation among the items. Only 36.8% of respondents agreed that such reviews are conducted, while 46.0% disagreed. This implies that proactive risk identification is not consistently embedded across the banks. Irregular risk assessments make it difficult for banks to detect emerging threats early and prepare appropriate responses.

Respondents' awareness of the bank's structured process for ensuring preparedness during BCP events recorded a mean of 2.99 and a standard deviation of 1.40. The mean was close to the midpoint, suggesting that employee awareness of BCP preparedness procedures was moderate but not strong. The wide variation indicates differences in awareness among respondents, possibly arising from variations in communication, departmental exposure, or involvement in continuity planning activities. Such gaps may affect coordination, response speed, and role clarity during disruptions.

The highest mean was recorded for the statement that the bank conducts risk assessment reviews frequently to evaluate the effectiveness of its BCP strategy, with a mean of 3.09 and a standard deviation of 1.47. This suggests moderate agreement that some banks assess the effectiveness of their continuity strategies. However, the wide variation shows that this practice is not experienced consistently by all respondents, implying that the frequency and quality of these reviews differ across institutions.

The lowest mean was recorded for the statement that the bank collects feedback from BCP drills consistently and uses it to improve future planning, with a mean of 2.88 and a standard deviation of 1.41. This indicates relatively low agreement with the use of drill feedback as a basis for improving BCP processes, and the variation suggests differing experiences regarding whether feedback is actually collected, analyzed, and applied. Feedback mechanisms therefore appear to be a weak area in BCP implementation. Overall, the item means ranged from 2.88 to 3.09 and none of the practices attracted strong agreement, while all standard deviations were above 1.3. These results suggest that BCP practices are present in tier-one banks but are not uniformly implemented.

4.2 Descriptive Statistics on Resilience

The dependent variable was the resilience of tier-one commercial banks in Kenya. Respondents were asked to indicate their level of agreement with statements on improvements in operational continuity, recovery capacity, the ability to withstand economic shocks, profitability, and competitiveness. The findings are presented in Table 2.

Table 2

Descriptive Statistics on Resilience

Statement	Mean	Std. Dev.
Our organization has significantly improved its ability to maintain operations.	3.07	1.48
This organization experiences smoother recovery during unexpected events.	3.07	1.38
This bank has strengthened its ability to withstand economic shocks.	3.09	1.36
Recent financial strategies have ensured continued profitability.	3.06	1.42
The organization has made significant improvements in its ability to stay competitive in the market.	2.98	1.42
Recent strategic initiatives have enhanced the organization's competitiveness.	2.91	1.39
Overall	3.03	1.41

Note. Source: Field Data (2026).

Table 2 indicates that resilience among tier-one commercial banks in Kenya was perceived to be moderate, with an overall mean of 3.03 and a standard deviation of 1.41. This suggests that respondents held slightly positive but not strong perceptions of the resilience of their institutions, while the wide variation shows that resilience outcomes were not experienced uniformly across banks or operational units. The statement that the bank has strengthened its ability to withstand economic shocks recorded the highest mean of 3.09 and the lowest standard deviation of 1.36, suggesting that banks have made some progress in absorbing shocks and remaining stable during difficult conditions.

The statements that the organization has significantly improved its ability to maintain operations and that it experiences smoother recovery during unexpected events each recorded a mean of 3.07, while the statement on continued profitability recorded a mean of 3.06, indicating moderate agreement on operational continuity, recovery, and profitability. Competitiveness-related outcomes were rated lower, with means of 2.98 for improvements in the ability to stay competitive and 2.91 for the contribution of recent strategic initiatives to competitiveness. These results suggest that tier-one banks have made some progress in operational continuity, recovery capacity, shock absorption, and profitability, but competitiveness-related resilience remains relatively weaker.

4.3 Test for Normality

Before conducting the inferential analysis, a normality test was carried out to determine whether the data on business continuity planning and resilience followed a normal distribution suitable for parametric analysis. The Kolmogorov-Smirnov and Shapiro-Wilk tests were applied, and the results are presented in Table 3.

Table 3

Test for Normality

Variable	K-S Statistic	df	Sig.	S-W Statistic	df	Sig.
Business Continuity Planning	0.081	163	0.092	0.976	163	0.084
Resilience	0.072	163	0.173	0.981	163	0.148

Note. Source: Field Data (2026).

The results in Table 3 show that the p-values for business continuity planning (0.092 and 0.084) and resilience (0.173 and 0.148) exceeded the 0.05 threshold under both the Kolmogorov-Smirnov and Shapiro-Wilk tests. This means that the distribution of the data did not differ significantly from normality. The normality assumption was therefore satisfied, making the data appropriate for parametric analysis, including correlation and regression analysis.

4.4 Correlation between Business Continuity Planning and Resilience

Pearson correlation analysis was conducted to establish the direction, strength, and significance of the relationship between business continuity planning and the resilience of tier-one commercial banks in Kenya. The results are presented in Table 4.

Table 4

Correlation between Business Continuity Planning and Resilience

Variable		Resilience	Business Continuity Planning
Resilience	Pearson Correlation	1.000	
	Sig. (2-tailed)		
Business Continuity Planning	Pearson Correlation	.615**	1.000
	Sig. (2-tailed)	0.000	
	N	163	163

** Correlation is significant at the 0.01 level (2-tailed).

Note. Source: Field Data (2026).

The results in Table 4 show a strong, positive, and significant relationship between business continuity planning and resilience ($r = 0.615$, $p < 0.05$). This indicates that banks that regularly update their BCP drills, maintain alternative banking channels, conduct structured risk assessments, and integrate feedback into their continuity plans are more likely to improve their operational stability and recovery capacity.

These findings agree with Steen et al. (2024), who emphasized that resilience depends on proactive preparation, structured crisis response, and continuous improvement, and whose conceptual framework highlighted adaptability and learning as pillars of resilience. While that study lacked empirical validation, the present findings provide quantitative evidence within the Kenyan banking context. The findings are also consistent with Riglietti et al. (2021), who found that well-structured business continuity plans significantly enhance resilience by reducing

vulnerabilities and ensuring rapid recovery, and with Kesa (2023), who established that organizations with well-structured recovery plans experience less downtime and lower losses during disruptions.

4.5 Regression Analysis of Business Continuity Planning on Resilience

Regression analysis was conducted to determine the effect of business continuity planning on the resilience of tier-one commercial banks in Kenya. The regression coefficients are presented in Table 5.

Table 5

Regression Coefficients for Business Continuity Planning

Model	B	Std. Error	Beta	t	Sig.
(Constant)	0.214	0.139		1.540	0.125
Business Continuity Planning	0.312	0.061	0.341	5.115	0.000

a. Dependent Variable: Resilience

Note. Source: Field Data (2026).

The results in Table 5 show that business continuity planning had a positive and significant effect on the resilience of tier-one commercial banks in Kenya ($\beta = 0.312$, $p = 0.000$). The t -value of 5.115 exceeded the critical value of 1.96, confirming that the effect was statistically reliable. This means that a unit improvement in business continuity planning results in a 0.312-unit increase in resilience. The standardized coefficient of 0.341 further confirms its substantial contribution to resilience.

The finding supports Steen et al. (2024), who argued that well-organized continuity systems and forward-looking crisis responses improve institutional resilience. It also aligns with Corrales-Estrada et al. (2021), who observed that combining resilience capabilities with continuity strategies improves organizational stability, although their work was not based on empirical testing. The result further corroborates Moşteanu (2024), who concluded that proactive risk assessment and flexibility are central to business resilience, and Galaitsi et al. (2023), who noted that business continuity planning prevents downtime and facilitates quick recovery. Unlike the SMEs studied by De Matteis et al. (2023), tier-one banks have the resources for comprehensive continuity planning, suggesting that the moderate ratings reflect uneven implementation rather than a lack of capacity.

The findings also lend support to contingency theory as advanced by Woodward (1958) and Lawrence and Lorsch (1967), which holds that organizations must align their internal arrangements with the uncertainty of their environment. The significant effect of business continuity planning on resilience shows that banks which fit their continuity arrangements to their risk environment are better able to withstand disruptions. Similarly, the findings reinforce dynamic capabilities theory (Teece et al., 1997; Teece, 2007), since risk assessment reviews, alternative channels, and drill feedback represent the sensing, seizing, and reconfiguring routines through which banks adapt to disruption. The relatively low rating on the use of drill

feedback, however, suggests that the learning dimension of these capabilities, emphasized by Zollo and Winter (2002), remains the weakest link in the continuity planning of tier-one banks in Kenya.

5. CONCLUSION

The study sought to analyze the effect of business continuity planning on the resilience of tier-one commercial banks in Kenya. Based on the findings, the study concludes that business continuity planning is significant in improving the resilience of tier-one commercial banks in Kenya. Structured continuity frameworks, regular risk assessments, alternative service channels, and systematic feedback mechanisms provide a stable foundation for sustaining operations during disruptions.

However, the study further concludes that business continuity planning practices in tier-one banks are present but not uniformly implemented. The moderate ratings and wide variation in responses show that the updating of BCP drills, the availability of alternative banking channels, proactive risk assessment, and employee awareness of preparedness processes differ considerably across institutions. The use of feedback from BCP drills to improve future planning emerged as the weakest practice, indicating that the learning component of continuity planning has not yet been adequately institutionalized.

The study also concludes that without institutionalized and consistently implemented continuity systems, banks remain exposed to operational interruptions and prolonged recovery periods. Embedding proactive, regularly reviewed, and organization-wide business continuity mechanisms is therefore essential for ensuring sustained operational stability and institutional resilience in the banking sector.

6. RECOMMENDATIONS

The study recommends that tier-one commercial banks in Kenya institutionalize structured business continuity planning frameworks. Banks should ensure that continuity plans are not merely documented but are actively operationalized through regular drills, scenario testing, and periodic reviews aligned with emerging risks such as cyber-attacks, system outages, pandemics, and third-party failures.

Tier-one commercial banks should strengthen alternative service delivery channels, including digital platforms, mobile and agency banking, and backup systems, to guarantee uninterrupted service during system failures or external disruptions. Since fewer than four in ten respondents agreed that sufficient alternative channels are available, banks should regularly test the capacity of these channels to carry transaction volumes during outages.

Bank management should embed regular and proactive risk assessment reviews into their continuity planning cycle. Risk reviews should be conducted frequently, coordinated across departments, and used to evaluate the effectiveness of the BCP strategy.

Tier-one commercial banks should embed structured feedback mechanisms within business continuity exercises to facilitate continuous improvement. Feedback from BCP drills should be

systematically collected, analyzed, documented, and translated into specific improvements in the continuity plan, with clear responsibility assigned for implementing the lessons learned.

Bank boards and senior management should integrate business continuity planning into core governance and risk management structures so that continuity is overseen at the highest level of the institution. In addition, the Central Bank of Kenya and other policymakers should consider developing resilience-focused continuity guidelines that set minimum standards for drill frequency, alternative channel capacity, risk assessment reviews, and post-drill reporting.

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