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UNIVERSITY

MAKERERE UNIVERSITY BUSINESS SCHOOL

**BUSINESS PROCESS REDESIGN, FINANCIAL RESILIENCE AND BUSINESS
PERFORMANCE OF COMMERCIAL BANKS**

BY

MBUBI DIANA

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PLAN A

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DECLARATION

I, **Mbubi Diana** declare that this dissertation is a result of my concerted research effort and investigation. It has never been submitted to any other institution for any degree award.

Signature.....*Mbubi Diana*.....

Date.....*16th November 2023*.....

MBUBI DIANA

2019/HD10/25818U

APPROVAL

This dissertation has been submitted for examination with our approval as University Supervisors of Makerere University.

Signed.....

Date.....17/11/2023

Dr. Nkurunziza Gideon

Makerere University Business School

Signed.....

Date.....17/11/2023

Mr. Ssenyange Kasimu

Makerere University Business School

DEDICATION

This work is dedicated to my beloved parents Mr. Tom Sabiiti and the late Rosemary Sabiiti, my Husband Mr. Christian Karamagi, my supervisors, friends and siblings for their endless support, encouragement, and inspirational insights towards the completion of this report.

God bless you all.

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LIST OF ACRONYMS

CVI	Content Validity Index
SPSS	Statistical Package for Social Scientists
BPR	Business Process Redesign

ABSTRACT

Performance of commercial banks is of great importance as it helps to support the economy and make it efficient overall. The study examined the relationship between business process redesign, financial resilience and business performance of commercial banks in Kampala. The study adopted a cross-sectional research design along with a quantitative research approach. In this study, the researcher distributed 96 questionnaires of which only 90 questionnaires were returned representing a response rate of 93.7%. Data was aggregated to the unit of analysis and then analysed using multiple regression, correlation and mediation analyses to answer the stated study objectives. Study findings revealed a positive relationship between business processes redesign and business performance, business processes redesign, financial resilience and business performance. Regression findings revealed that business processes redesign and financial resilience predicated up to 40.3% (adjusted R square = 0.403) of the observed variance in business performance. Findings revealed that financial resilience plays a partial mediating role in the relationship between business process redesign and business performance of commercial banks. It was further observed that commercial banks that believe that innovative rethinking strengthens employees' ability to perform tasks in an efficient manner through knowledge sharing will increase employee loyalty, improve public image, attract many customers and increase market share. It was recommended that commercial banks need to emphasize and foster a culture of continuous improvement in their operations. Commercial banks should develop and implement a comprehensive financial resilience framework.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter of the study provides the background to the study, statement of the problem, objectives of the study and the research questions of the study. It also highlights the significance of the study and conceptual framework.

1.2 Background

Business performance of commercial banks has been a concern to many scholars and policy makers. It has been highlighted by Nkundabanyanga et al. (2020) that firm characteristics of size, age, innovation, and financial resilience have a predictive force on business performance of public interest firms such as commercial banks. Business performance is often the most practical index to measure the success of a firm (Ejermo & Xiao, 2014). Understanding business performance as the situation in which companies have not closed their operations temporarily or permanently, the academic literature recognizes it through the work of Ejermo and Xiao (2014); Zhao and Burt (2018), which is due to the high productivity and efficiency of their processes. Non-financial indicators of business performance include; vision, drive and leadership; Corporate governance, structure and innovation; and Value-adding organizational collaborations and networks (Subhan, 2016). The financial indicators include profitability, solvency, liquidity and operational efficiency (Baraja & Yosya, 2018). Performance of the business could be linked to business process redesign (Fetais et al., 2022).

Business process redesigns (BPR) is concerned with the fundamental rethinking and redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed (Hammer & Champ, 1993). This means that BPR requires radical transformation as opposed to incremental change and hence the fundamental question an organization must address before adopting BPR is if there is a

compelling business case for change. Business Process Reengineering involves changes in structures and in processes within the business environment. Business process redesigns result in higher delivery reliability, shorter lead times and thus quicker response to demand (Fetais et al., 2022). However, when there are inadequate business processes, resilience is limited. Banking. The net benefit of process redesign is huge cost and time savings and could potentially contribute to business performance (Postolache, 2017). Besides process redesign, business performance could also be linked to financial resilience (Santoro et al., 2016).

Moody institute in 2014, defined resilience as the ability to absorb shocks and the proper functioning of a financial system in all conditions and indicators such as leverage, asset and debt structure, communication network structure (financial stability indicators) and credit risk-related indicators, derivatives and bond status in the markets, and indicators related to economic productivity (macroeconomic indicators) were defined as the most important indicators of financial resilience (Crossen, 2014). This entails robustness, adaptability and flexibility (Taylor, 2013). Resilience has both a macro angle and a micro angle, “as greater resilience at the individual bank level reduces the risk of system-wide shocks (Basel Committee on Banking Supervision, supra note 8, at 2.). However, it is not possible to achieve good financial resilience when operational efficiency is staggering (McGuire & Peter, 2016). Financial resilience can be affected by business processes redesign and customer satisfaction. Financial services such as savings, credit, insurance, and digital payments can increase resilience (CGAP 2019; Hussain, Endut, Das, Thanvir, 2019). If banks reimagine and modernize their business processes, they can take advantage of new opportunities and capture more of the forecast growth (Bahillo, Gerhard, Harlalka, Havas & Kremer, 2022). As such, banks need to overcome operational resilience challenges (Graham, 2021). Quick response to customer inquiries, speed of complaint handling improves operational and financial performance (Negrão, Filho & Marodin, 2017).

To illustrate the possible link between businesses processes, financial resilience and business performance of commercial banks, Kampala is used to accomplish this investigation. In Uganda, credit growth is yet to return to pre-pandemic levels. During the quarter ended March 2022, loans by all commercial banks increased by 0.9 percent to Ush.18.54 trillion, compared to growth of 2.6 percent in the prior quarter to December 2021 (Bank of Uganda, 2022). Averagely, credit risk as measured by the ratio of non-performing loans to gross loans and advances (NPL ratio), remains moderate. However, non-performing loans (NPLs) started to rise, with the SFIs' aggregate stock of NPLs growing by 9.5 percent to reach UGX 1.0 trillion in the quarter ended March 2022 (Bank of Uganda, 2022). Aggregate NPL ratios for Credit Institutions and Microfinance Deposit Institutions improved from 8.5 percent to 7.7 percent, and 10.1 percent to 8.0 percent respectively. NPLs to total gross loans have been increasing quarterly till March 2022 (Dec-20, 5.27; Mar-21 5.38; Jun-21 4.79; Sep-21 5.43; Dec-21 5.27; and Mar-22 5.79) (Bank of Uganda, 2022). Clearly, there are variations in the predictable survival ability of the commercial banks.

Many studies have been carried out about business process redesign, financial resilience and business performance in Uganda. For instance Mwesigwa (2020) shows that the top five banks – Stanbic, Centenary, Standard Chartered, Absa and Dfcu have tried to streamline the businesses processes and have attained financial resilience, which is also necessary to ensure business performance. Mugumya (2018) covers firm characteristics, innovation, financial resilience under austerity and business performance of commercial banks in Uganda. Nkundabanyanga et al. (2020) looked at business performance as a result of firm characteristics and financial resilience without considering business process redesign, hence a gap pending to be covered by the current study in the context of Uganda. Currently, there seems to be a knowledge gap regarding the possible link between business process redesign,

financial resilience, and business performance of commercial banks, hence the need for the current study.

1.3 Statement of the problem

The business performance of commercial banks is of paramount importance as it helps to support the economy and make it efficient overall (Robert, 2015; Rajan, 2010). This is especially important in the aftermath of Covid-19 and its related disruptions. As such, commercial banks have adopted several strategies in order to attain business performance (Bank of Uganda Quarterly Financial Stability Review March 2022). However, BoU reports (2021 and 2022) show that many commercial banks in Uganda lack robustness, adaptability and flexibility which indicate business process redesign and financial resilience challenges which undermine financial institution performance. During the period 2015 to 2022, Bank of Uganda reports rising fraud, arrears, bad loans, delays in service delivery against declining loan portfolios (Bank of Uganda Stability Reports, 2015 to 2022). NPLs to total gross loans have been increasing quarterly till March 2022 (Dec-20, 5.27; Mar-21 5.38; Jun-21 4.79; Sep-21 5.43; Dec-21 5.27; and Mar-22 5.79) (Bank of Uganda, 2022). All these point to potential performance challenges. From the scholarly perspective, there is a scanty literature on the link between business process redesign and business process performance of commercial banks while paying attention to mediating role of financial resilience. From the above, there is need to explore the relationship between business processes redesign, financial resilience and business performance of commercial banks in Kampala.

1.4 Purpose of the study

To examine the relationship between business processes redesign, financial resilience and business performance of commercial banks in Kampala.

1.5 Research Objectives

This study was guided by the following research objectives.

- i. To examine the relationship between business processes redesign and business performance of commercial banks in Kampala.
- ii. To examine the relationship between business processes redesign and financial resilience among commercial banks in Kampala.
- iii. To examine the relationship between financial resilience and business performance of commercial banks in Kampala.
- iv. To examine the mediating role of financial resilience in the relationship between business processes redesign and business performance of commercial banks in Kampala.

1.6 Research Questions

This study was aimed at answering the following research questions.

- i. What is the relationship between business processes redesign and business performance of commercial banks in Kampala?
- ii. What is the relationship between Business processes redesign and financial Resilience among commercial banks in Kampala?
- iii. What is the relationship between financial resilience and business performance of commercial banks in Kampala?
- iv. What is the mediating role of financial resilience in the relationship between business processes redesign and business performance of commercial banks in Kampala?

1.7 Scope of the study

The scope of this study was confined to the geographical, subject and time scope.

1.7.1 Geographical Scope

The study was confined to Kampala since it houses most commercial banks, and this makes it easy for the study to get the necessary primary data to inform the study.

1.7.2 Subject Scope

The study was confined to business processes redesign, financial resilience and business performance of commercial banks. The intent was to examine how these factors are associated in the context of the commercial banks in Uganda focussing on Kampala.

1.7.3 Time Scope

This study was carried out between May 2022 and May 2023. This was meant to provide fresh insights into the subject matter and capture recent trends to inform policy and practice.

1.8 Significance of the study

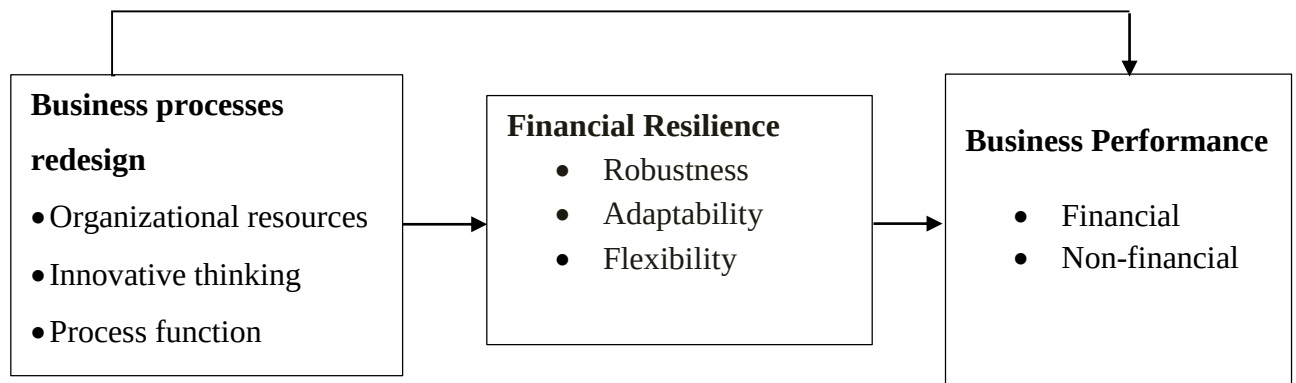
The current exploration is likely to highlight relevant data to inform policy makers on how best to improve performance of banks through forming and implementing correct policies that strengthen bank's operations.

Commercial banks could use this study as a self-audit to examine what ought to be done to improve the businesses processes redesign, have financial resilience and attain performance among commercial banks.

To other researchers and academicians, this study provides a reference point for them to build on and make contemporary recommendations to expand on the knowledge available in future.

The general population may benefit from the current study as banks get to improve on the services and processes used to render better services.

1.9 Conceptual Framework



Source: Adopted from Orogbu et al. (2015); Akam et al. (2018); Rajapathirana and Hui (2018); Robert, 2015; Nkundabanyanga (2016); Ittner & Larcker (2013) and modified by the researcher.

In the above conceptual framework, the independent variables is Business processes redesign, studied in terms of organizational resources, process function and innovative thinking (Orogbu et al., 2015; Akam et al., 2018; Rajapathirana & Hui, 2018). It is thought that the business processes redesign influence financial resilience among commercial banks. The mediating variable is financial resilience (Robustness, Adaptability, and flexibility) (Robert, 2015). Business performance is the dependent variable studied in terms of financial and non-financial indicators (Nkundabanyanga, 2016; Ittner & Larcker, 2013).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews the theoretical basis as well as the works of different scholars on the concepts of Business processes redesign, financial resilience and business performance. Also explored are scholarly reviews on the relationships between these variables.

2.1 Theoretical Review

2.1.1 Complexity theory

Complexity theory provides an understanding of how systems, such as the economy and global corporations, grow, adapt, and evolve (Sammut-Bonnici, 2015). It explains how the relationships between members of these systems give rise to the collective behavior and sheds light on how a system interacts with its environment. It does not need to have a complex explanation. The principle of Occam's razor encourages us to simplify complexity, where possible, for the study of organizational change. The discussion can be simplified by delineating the difference between complicated and complex systems. Complicated requires attention to detail whereas complexity calls for attention to the behavior of the whole system. Organization move from a complicated mode of handling day-to-day matters to a more complex mode of operation that evolves and adapts with its internal divisions and its environment. Complexity theory recognizes that economic and organizational phenomena are similar to those observed in science and in nature. The best way to understand the similarity is to look at the key components of complex systems: increasing returns, self-organizing systems, continuous adaptation, sensitivity to initial conditions, and nonlinearity.

Complexity theory is used in business as a way to encourage innovative thinking and real-time responses to change by allowing business units to self-organize. Sherman and Schultz (1999) argue that modern business moves in a nonlinear fashion, with no continuity in the

flow of competitive events, except when observed from hindsight. In order to effectively put complexity theory to work, however, organization leaders need to give up rigid control of these systems from above. Far more can be learned by stepping back from the day-to-day running of the organization and watching for emergent properties and organizational patterns. Those conditions or patterns that bring about the best solutions should be preserved whenever possible. Managers also need to allow organizations to evolve in response to ongoing messages from customers.

The idea that allowing complex systems to self-organize will yield the best solutions has validity, but complexity theory is not a panacea for all organizations. The notions of complexity theory assume that people in these companies are enthusiastic, intelligent, and can effectively work in teams—requiring less management than workers in more traditional, hierarchical, rigidly-controlled environments. Unfortunately, however, these fast-growing, evolutionary companies with bright, ambitious workers may need more management rather than less. Companies that are shaped and reshaped on such a frequent basis—constantly adapting to a changing business environment—lose some of the stability found at traditional corporate giants such as the industrial and automotive behemoths (Battram, 2002)

2.2 Business Process Redesign

The term business process redesign refers to a complete overhaul of a company's key business process with the objective of achieving a quantum jump in performance measures such as return on investment (ROI), cost reduction, and quality of service. Taking into consideration and combining these different perspectives, the author proposes a more holistic definition of BPR, which is: “BPR is the fundamental rethinking and radical redesign of business processes and the analysis and design of workflows to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed to achieve substantial gains in the overall organisational performance.

BPR has great potential for increasing productivity through reduced process time and cost, improved quality, and greater customer satisfaction, but it often requires a fundamental organisational change to accompany it (Sturdy, 2010).

Business process redesign/reengineering (BPR) is a “business management strategy” that, based upon the process-based approach to organizational functions and using the power of IT, “achieve a drastic improvement in efficiency and reduce wastage of efforts ... to achieve an improvement in performance and revenue” (Susanto, Fang-Yie & Chen, 2019).

2.3 Financial Resilience

Resilience is the ability of individuals to ‘bounce back’ after adverse events and experiences, to adapt to changing circumstances and to deal with environmental stress (Abbott-Chapman, Denholm & Wyld, 2008). For the purposes of this research, financial system resilience is defined as follows: ‘The capacity of the financial system to adapt in response to both short-term shocks and long-term changes in economic, social, and ecological conditions while continuing to fulfill its functions in serving the real economy. The ‘real economy’ comprises non-financial companies, households, non-profit organisations, and the public sector, because the ultimate purpose of the financial system is to serve these sectors. Transactions that take place purely between financial sector companies should theoretically relate eventually to some benefit to the real economy. Therefore this definition of resilience requires not just that the financial sector can absorb shocks, but that it can do so whilst continuing to maintain its purpose – to serve the real economy (Robert, 2015).

Bank resilience is important as it helps banks to play all their roles in support of the economy and make it efficient, overall (Rajan, 2010). Commercial banks have a crucial role in the economy as they enhance economic growth through efficient allocation of financial resources (World Bank, 2015; Giovannini, Iacopetta & Minetti, 2013). In order for commercial banks

to give their best there is need for them to be financially resilient (Finney, 2016). Financial resilience is a relatively new concept (Muir, Reeve, Connolly, Marjolin, alignac & Ho, 2016; Finney, 2016).

2.4 Business performance

The business performance is essential in keeping the business operating for a certain amount of time, especially when some crisis situation comes (Adam & Alarifi, 2021). Understanding business performance as the situation in which companies have not closed their operations temporarily or permanently, the academic literature recognizes it through the work of Ejermo and Xiao (2014); Zhao and Burt (2018), which is due to the high productivity and efficiency of their processes. At the peak of Covid-19, strategists noted that it was important to help businesses adopt a survival mindset, develop financial resilience, and adjust their business model to changing market needs and opportunities. The ability to provide that support would enable the firms to be able to survive the crisis and lead the economic recovery (Thomas, 2020). Financial measures include profitability, cash flow position, return on investment, inventory turnover, budget versus actual. The non-financial measures include customer satisfaction, product or service quality, market share, employee efficiency (Mashovic, 2018).

2.5 Business Processes Redesign and Business performance

Several studies have confirmed the efficacy of business process redesign in influencing organizational performance in various sectors like educational, banking, tourism and public sectors (Herminawaty, 2016; Husameddin & Mohammad, 2018; Akam et al., 2018; Orogbu, Onyeizugbe & Onuzulike, 2015; Naveeda, 2014; Mwaura, 2016). Business process redesign is essential since businesses are operating in a very volatile business environment, with the globalization making it more increasingly challenging (Olajide & Okunbanjo, 2020).

Business process redesign plays a vital role in the enhancement of productivity and efficiency of many organizations. A crowd of interrelated tasks that creates value is called a business

process (Habib & Wazir, 2012). Reengineering primary goals aimed at to reduce wastage, improve efficiency and ultimately reduce costs (Lotfollah et al., 2012). And an increase in consumer requirements for both product and service efficiency and effectiveness has resulted in Business Process Reengineering (Al-Mashir et al., 2001). Reengineering also helps organizations to throw away their old fashioned processes to achieve new heights of success (Jemal et al., 2011). Hammer and Champy, (1993) also stated that BPR focuses on processes and not on tasks, jobs or people. It endeavors to redesign the strategic and value added processes that transcend organizational boundaries.

Previous literature reveal that business process redesign enables organizations to improve productivity and relationships with customers, and reduce time to launch new products and services in terms of cost, quality, customer satisfaction and shareholders' value by identifying and redesigning the important processes of the firm (Akam, Okeke, Kekeocha & Onuorah, 2018). This is supported by Nadeem and Ahmad (2016) who concluded that business process redesign enhances the performance of an organization since it challenges conventional processes of an organization and enables an organization to capitalize on substantial developments made in technology and to enhance the capabilities of the employees (Orogbu, Onyeizugbe & Onuzulike, 2015).

Existing studies indicated that redesigning business processes puts an organization in a better position for it to favorably compete in the market. For instance, the study conducted by Magutu, Nyamwange and Kaptoge (2010) which investigated business process redesign and competitive advantage revealed that the organizations gain competitive advantage by implementing business process redesign. This is in line with Abdi, Zarei, Vaisy and Parvin (2011) who concluded that adopting new and improved processes makes a new environment that drives employee to innovate and look forward to new processes. As a result, employee performance increases and thus increasing the chances of business performance.

Furthermore, another study conducted by Orogbu, Onyeizugbe and Onuzulike (2015) revealed that there is positive relationship between process redesign and employee satisfaction, work process innovation influences employee retention. Hence, satisfied employees are highly motivated to execute their activities effectively which increases business performance. This is in agreement with Obalum and Okocha (2018) who examined business process reengineering and corporate performance of deposit money banks in Rivers State. This study concluded that there is a positive connection between business process re-engineering and corporate performance of deposit money banks. Additionally, Akam, Okeke, Kekeocha and Onuorah (2018) revealed that financial resources have higher significant effect on the performance in manufacturing firms in Nigeria than other resources. Similarly, Ogbo, Attah, Ewurum and Ugban (2015) looked at business process redesign in the deposit money banks' performance and demonstrated that a significant and positive relationship existed between corporate restructuring and competitive advantage. This is supported by various studies which include; Herminawaty (2016); Nadeem and Ahmad (2016); Eke and Achilike (2014); Akingbade (2014) Naveeda (2014); Ringim, Razalli and Hasnan (2012); Ozcelik (2010); Sidikat and Ayanda (2008); Adeyemi and Aremu (2008) that revealed that business process redesign has positive and significant effect on organizational performance.

2.6 Business Processes Redesign and Financial Resilience

Business Process Redesign/Re-engineering (BPR) has had far-reaching benefits for an enormous range of manufacturing and service industries. Companies increasingly incorporate various dynamic mechanisms such as BPR to fulfill the current climate requirements to improve the quality of products and services and gain competitive advantages. Although financial organizations are not exceptions to this situation, this methodology has not gained any significant momentum in the financial industry, and the

available academic researchers have not accordingly addressed the advantages the BPR methodology can bring for this industry (Golchini, 2021)

Bahillo et al. (2022) revealed that technology is now a differentiator. Banks are increasing their investments and integrating tech platforms to adopt a modular approach to SME lending. Digital engagement is mandatory. In the past, digital engagement was merely “good to have” in SME lending. Now it is mandatory. Increasing the level of digital engagement with customers and reducing the number of manual processes for approval will help retain customers and attract new ones. By redesigning and digitizing a significant portion of the customer journey, banks can substantially enhance the SME experience. Rethinking legacy policies and processes can also help streamline lending. The best policies and processes enable banks to increase their straight-through processing of customers and to route only a carefully sized and selected proportion of applicants through manual checks. Redesigning the credit memo and credit-decision making process with standardized documentation also significantly enhances the efficiency of the process. Bahillo et al. (2022) further tell that, by creating a single source of truth, a bank can automate data retrieval for decision making with a digital signature and track changes for the next actor. This process vastly accelerates underwriting with decision making, enhances the experience of relationship managers, ensures a complete audit trail, and typically reduces “time to yes” by 50 percent (and significantly more in situations characterized by repeated information requests to customers, triggered by manual-review processes). For example, an emerging-market bank, keeping in mind the customer experience, recently redesigned its processes to offer preapproved loans in minutes to its small-business customers using the bank’s mobile app.

According to Hammer and Champy (1993) cited in Fetais et al. (2022), the BPR approach thoroughly reshapes a business’s practices to achieve better overall performance in terms of costs, quality of service, speed, and proficiency. Therefore, modifications to improve

business productivity are necessary for a fast-changing global environment typified by intense competition and growing technological advancement. To achieve the best results, it is preferable for the management's agenda to adapt and plan according to these changes. Furthermore, BPR has also become an important tool for the public sector as it has been effectively utilized over recent decades; BPR has helped public organizations achieve more efficiency in the healthcare, education, and national economic project sectors. BPR can potentially help practitioners meet their objectives (Chen, 2016; Dewi, Anindito & Suryadi, , 2015) which might include an increase in effectiveness and efficiency and a reduction in overhead cost. BPR: Involves a radical redesign of business processes; uses information technology to enable new business processes; attempts to achieve organizational-level strategic outcomes; tends to be inter-functional in its efforts (Fetais et al., 2022).

In all the above attempts, there is effort to show that business process redesign could be linked to financial resilience. However, the Uganda context is missing and also the statistical significance of the relationships is not vividly discussed. This creates a knowledge gap worthy investigating.

2.7 Financial Resilience and Business performance

Financial resilience is a key factor in determining an organization's ability to withstand financial shocks and uncertainties while maintaining its operations and financial stability. There is a growing body of research that highlights the positive impact of financial resilience on organizational performance. Numerous studies suggest that financial resilience has a positive impact on organizational performance, regardless of the industry or economic environment. Santoro et al. (2020) evaluate the effect of entrepreneur resilience on entrepreneurial perceived success, and the moderating role of stakeholders' engagement on the aforementioned relationship, proposing and testing two related hypotheses. The research findings indicate that perceived resilience of entrepreneurs is positively associated with their

perception of success. Moreover, the relationship is stronger for entrepreneurs with a wide network of stakeholders. Businesses operate in dynamic and changing environments, and the sustainability of the managed business is threatened by unpredictable factors (Campanella, Del Giudice, Thrassou & Vrontis, 2020). In this scenario, firms adapt structures and strategies while businesses adapt their behaviours to face these changes in the environments in which they operate in order to survive and even find new business opportunities. All types of organisations face discontinuities caused by instability within their operating environments due to internal and external uncertainty due to changes in market, technological, political and socio-cultural conditions (Santoro, Vrontis, & Pastore, 2017). In this atmosphere, it has been suggested that resilient organisations are able to cope with such uncertainties by increasing the likelihood of tolerating risks and adjusting environmental inputs (Del Giudice, Carayannis & Maggioni, 2017).

A study by Luo et al. (2021) found that financial resilience positively impacts firm performance, and this effect is mediated by the ability to leverage financial resources during economic downturns. Another recent study by Cheng et al. (2020) investigated the relationship between financial resilience and firm performance in the Chinese manufacturing industry. The results showed that financial resilience has a positive impact on firm performance, and this effect is moderated by firm size. A study by Khan et al. (2020) examined the impact of financial resilience on the performance of small and medium-sized enterprises (SMEs) in Pakistan. The findings showed that financial resilience positively affects SME performance, and this effect is more significant for firms operating in highly uncertain environments. In the banking industry, Alghalith and Lahiani (2020) investigated the impact of financial resilience on the performance of European banks during the COVID-19 pandemic. The results showed that banks with higher financial resilience were able to maintain their performance and financial stability during the crisis. A study by Reimann et al.

(2020) examined the relationship between financial resilience and firm survival in the German manufacturing industry. The findings showed that financial resilience positively affects firm survival, and this effect is stronger for firms that face higher financial risks.

Capacity for resilience enables an organisation to take appropriate actions and transformations in response to unanticipated events that potentially threaten its continued existence. In markets characterised by sudden jolts, a capacity for resilience may be necessary for business performance (Fiksel, Polyviou, Croxton, & Pettit, 2015). Despite recent interests in organisational resilience within the economics and business management fields (Lampel, Bhalla & Jha, 2014), individual resilience has received scarce attention and related works appear scattered in the literature.

In the above review, links are suggested between financial resilience and business performance. However, the studies are not explicitly on commercial banks, still, the studies are based on countries like China with different social –economic conditions which may make the results not comparable to the context of Uganda. Still, statistical rigor in the relationships is not well articulated. All these justify further exploration which the current study attempts.

2.8 The mediating role of Financial Resilience

Atre, Georgiopoulos, Jones and Sood (2019) observe that there is a link between operational efficiency and financial resilience. Atre et al. (2019) further observe that despite the transformational efforts by European and North American banks, their operational costs have on average remained mostly flat; with a few exceptions having achieved small reductions. Atre et al. (2019) further note that, banks that achieve significant productivity gains; Pinpoint where costs are today; Identify an integrated set of levers; reimaging the selected processes; estimate the transformation's full potential; Tailor the delivery approach.

Sporta (2018) aims to analyse operational efficiency as a financial distress factor as well as draw inferences on its relationship with financial performance measured by return on assets (ROA) and return of equity (ROE). The results indicated that there exists a positive significant relationship between operational efficiency and financial performance. The results indicated that operational efficiency has a positive significance as a financial distress factor on financial performance of commercial banks in Kenya. The link between technological efficiency and financial resilience seems to be grounded according to several authors. It is asserted that more and more banks are converting from their traditional approach of “bricks and mortar” into that of “clicks and mortar” (Kujur & Shah, 2015). Investigating the e-payment system and tele-banking services in Nigeria, Agwu and Carter, (2014) revealed the existence of a very modest move away from cash payments to electronic payments.

Adusei and McMillan (2016) show that there is no doubt that the instability of the banking sector poses a serious threat to the foundations of every economy. This is because when a lot of banks become distressed in the banking industry resources are misallocated, overall return on capital drops and high transaction costs are incurred in the industry. However, PwC (Courbe, 2016) looks at the dimension of technology and observe that the FinTech trends, from the cloud and peer-to-peer transactions to customer intelligence and cyber-security concerns, all rely on the rapid transmission and assimilation of data. Today’s systems do this too, of course, but without the scale or resilience that the future will require.

Courbe (2016) cautions that flexibility and security concerns must be embedded in the efforts to use technology to cause technical efficiency in the bid to realize improvements in financial resilience. It is not clear to what extent currently Ugandan banks are ready for this hence the need to explore how technology is being used to build technical efficiency and financial resilience in the banking sector in Uganda.

Furthermore, Nanjala, Ngugi and Sporta (2017) show that operational efficiency as a financial distress factor arises from maturity mismatches where liabilities have a shorter tenor than assets. Nanjala et al. (2017) indicated that there exists a positive significant relationship between operational efficiency and financial performance. The results indicated that operational efficiency has a positive significance as a financial distress factor on financial performance of commercial banks in Kenya. Finally, local literature from the financial Stability Report, June 2019 Bank of Uganda indicates that the banking sector's resilience to credit risk shocks over the year ended June 2019 improved as banks built substantial capital and liquidity buffers. In addition, real estate prices—which fundamentally underpin lending – were relatively stable through FY2018/19. However, the risks to financial stability are tilted on the downside mainly due to the rising public debt, prospects of a market downturn faced by key advanced economies, and the deepening trade conflict between the US and China and of recent the Russia and Ukraine tensions.

2.9 Summary and research gap

In the above review, authors have made an attempt to show the link between business process redesign, financial resilience and business performance. There is general consensus that these variables are linked. However, the links are largely descriptive with limited statistical back up. Still, the explorations are largely based on countries far ahead of Uganda thus making the findings not fully generalizable to inform policy and practice in the context of a low developed country like Uganda. Still, many of the studies are too general and not touching banking of finance sector which is likely to create inconsistencies in decision making. In light of all these gaps, there is need for further empirical investigation in the current state and context of Uganda. More so from the scholarly perspective, there is a scanty literature on the link between business process redesign and business process performance of commercial banks while paying attention to mediating role of financial resilience.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter describes how the research was carried out. It describes the research design, study population, sample size, sampling technique, data sources, data collection instrument, validity and reliability of data as well as the anticipated limitations.

3.1 Research Design

The researcher used a cross-sectional research design and a quantitative research approach. A quantitative research approach will be selected for simplicity and precision purposes when it comes to addressing objectives aimed at examining the cause-and-effect relationship between variables (Williams, 2007). A cross-sectional survey used because it enables collection of considerable amount of data in a snapshot (Bryman, 2004).

3.2 Study Population

The population for this study comprised of 26 commercial banks that are legally operating in Kampala (Bank of Uganda, 2022). The choice of all commercial banks is based on business performance needs of commercial banks and the current efforts in terms of process redesign and building resilience.

3.3 Sample Size and Sampling Procedures

Sample size comprised 24 commercial banks determined using Krejcie and Morgan (1970) guidelines. As such four respondents (branch manager, operations manager, credit manager, customer experience manager) represented each commercial bank. This implies that the study had 96 respondents. The study applied simple random sampling to derive the targeted sample. This was because simple random sampling gives accurate representation of a larger population. It also gives each element in the population an equal chance of being selected in a generalized form (Walliman, 2017). The unit of analysis was a commercial bank while the

unit of inquiry was the bank managers handling related roles. This is because of their position and knowledge concerning the subject being investigated. All commercial banks identified within Kampala formed one sampling frame. By way of picking without replacing, the researcher selected one business after another until 24 are separated from the population.

3.4 Data Sources

Primary sources of data require collecting data from the respondents with the help of data collection instruments. This source was adhered to because it is free from bias since data was collected for a specific purpose.

3.5 Data Collection Instruments

Data was collected using a self-administered close ended questionnaire, rated using a 5-Point Likert scale ranging from; 5-strongly agree, 4-agree, 3-Not sure, 2-disagree and 1-strongly disagree. The scale was selected to provide respondents with the extent to which they agree with the different notions (Likert, 1961). The questionnaire was divided into key sections to address precisely each variable. These include; background information of the respondents, business process redesign, financial resilience and business performance. Finally, the questionnaire instrument was embraced because it enables obtaining data from a large sample, and it is the most appropriate tool for collecting quantitative data (Saunders, Lewis & Thornhill, 2007).

3.6 Measurement of the Variables

The study utilized established measurement items by previous researchers to operationalize and measure the variables under the study.

Table 3.1: Measures of Variables

Variable	Indicators	Sources/authors
Business process redesign	Organizational resources, process function and innovative thinking	Orogbu et al. (2015); Akam et al. (2018); Rajapathirana & Hui, (2018).
Financial Resilience	Robustness, Adaptability, Flexibility	Robert (2015)
Business performance	Financial measures and Non-financial measures.	Nkundabanyanga, 2016; Ittner & Larcker, 2013).

3.7 Reliability and Validity of Instrument

3.7.1 Reliability

Cronbach Alpha coefficient was used to determine Reliability of the instrument. The reliability output from SPSS indicated in the table below, showed that the reliability of the study was found to be acceptable. According to George and Mallery (2003), if the reliability result is above 0.9 it is excellent, if it is above 0.8 it is good and if it is above 0.7 it is acceptable. Thus, the questionnaire based on the table below was reliable.

Table 3.1: Cronbach Alpha Reliability Results

	Number of items	Cronbach's Alpha
Business Process Redesign	13	.798
Financial Resilience	12	.877
Business performance	12	.824

Source: SPSS output

3.7.2 Validity

The validity of the study is concerned with the extent to which the data collection instruments accurately measure what they intend to (Amin, 2005). In this study, expert judgment and content validity index (CVI) was used. After drafting the questionnaire, it was shared with academic supervisors and experts to provide comments regarding the appropriateness and understandability of the items contained in the instrument. Based on their comments, the questionnaire was amended. CVI was also be used where the researcher distributed the

questionnaire to specific people who are conversant about the subject, not necessarily those targeted by the study to express the content validity. Based on the results obtained, the researcher was compute CVI using the formula, K/N where; K is the number of items identified as valid and N is the number of items under each construct. As a general rule, CVI should be 0.7 or better under to be considered valid (Creswell, 2014). Therefore, as indicated in table 3.1 below, all items contained in the questionnaire were found to be valid.

Table 3.2 Validity results

	CVI	Number of items
Business Process Redesign	0.82	13
Financial Resilience	0.81	12
Business performance	0.80	12

Source: Primary data

3.8 Data Processing and Analysis

The researcher used Statistical Package for Social Sciences (SPSS v.25) to analyze data. All the data collected from the field was analysed in order to enable the researcher to obtain clear understanding of the approaches used in the 5 Likert scale. This was achieved following descriptive statistics for example percentages and frequencies. The researcher used Pearson's correlation coefficient in order to determine the relationship between the independent and dependent variables. Regression analysis also conducted to determine the effect of the independent variable to the predictor variable.

In order to test the mediation effect of financial resilience, the four conditions of Baron and Kenny (1986) were tested namely; step 1: Show that the causal (Business processes redesign) variable is correlated with the outcome (business performance). Step 2: Show that the causal variable (Business processes redesign) is correlated with the mediator (Financial Resilience). Step 3: Show that the mediator (Financial Resilience) affects the outcome variable (business performance). And Step 4: To establish that Financial Resilience (the

mediating variable) completely mediates the relationship between (Business processes redesign and business performance).

3.9 Ethical considerations

The study was conducted after obtaining official permission from the University and the respective commercial being studied. The researcher also ensured that respondents freely accept to participate in the study. The participants were also informed of the objectives of the study to ensure informed consent. The privacy of the participants were protected by not revealing their personal details. All the findings were reported as found without any bias.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF THE FINDINGS

4.0 Introduction

This chapter provides information on presentation, analysis and interpretation of findings of the data collected for the study. The survey was carried out on business processes redesign, financial resilience and business performance of commercial banks in Kampala. The presentation is guided by the research objectives and the statistics are thus a reflection of the respondent's views on the research questions. This chapter starts with response rate, demographic characteristics and then findings representing the study objectives. The data is presented using percentages, frequencies organized in tables. Pearson's correlation coefficient was presented later in order to determine the relationship between the independent and dependent variables. Regression analysis was also conducted to determine the combined effect of the predictor variable on the dependent variable.

4.1 Response Rate

The survey covered a sample of 96 respondents of which only 90 of the respondents returned the questionnaires. This gave a response rate of 93.7%. This response rate is appropriate for analysis because Mugenda and Mugenda (2003) indicated that if the response rate is 50% or below, it shows that the data is inadequate for analysis, but if the response rate is 60%, it means that the data is good for analysis and if the response rate is 70% and above, then data is regarded as very good for analysis.

4.2 Demographic characteristics

This section presents personal profile (gender, age, level of education and number of years at work).

4.2.1 Gender of respondents

The gender of the respondents is indicated in table 4.1 below.

Table 4.1 Gender of the respondents

	Frequency	Percentage
MALE	30	33.3
FEMALE	60	66.7
Total	90	100

Source: Study Findings

Majority of the respondents were female at 66.7% while 33.3% were male. This implies that the banking sector predominantly employs more female than male.

4.2.2 Age of respondents

The age bracket of the respondents is indicated in table 4.2 below.

Table 4.2 Age of the respondents

	Frequency	Percentage
25-29yrs	13	14.4
30-34yrs	56	62.2
35-39yrs	21	23.3
Total	90	100

Source: Study Findings

The majority of the respondents were aged between 30 and 34 years implying that they were young and energetic staff who were engaged in the bank operations.

4.2.3 Educational level

The education level of the respondents is indicated in table 4.3 below.

Table 4.4 Educational level of the respondents

	Frequency	Percentage
Bachelor's degree	62	68.9
Master's degree	28	31.1
Total	90	100

Source: primary data

The majority of the respondents had a bachelors' degree indicating that they have the technical knowledge which would enable them in their work performance.

4.2.4 Experience in business

The experience of respondents is indicated in table 4.5 below.

Table 4.5 Experience of respondents

	Frequency	Percentage
2-5 years	19	21.1
6-10 years	48	53.3
above 10 years	23	25.6
total	90	100

Source: primary data

The majority of the respondents had worked in the firm for 6 to 10 years (53.3%). This implies that these respondents had sufficient knowledge and experience in their daily banking activities.

4.2.5 Designation

The designation of respondents is indicated in table 4.6 below.

Table 4.6 Designation of respondents

	Frequency	Percentage
Operations manager	46	51.1
Branch manager	32	35.6
Accounts manager	12	13.3
Total	90	100

Source: primary data

The majority of the respondents were operations managers (51.1%). This implies that these were the always available to work given the nature of the operations and could adequately provide information concerning the study as requested to them in questionnaire.

4.2.6 Years in operations

The years of operations is indicated in table 4.6 below.

Table 4.7 Years of operations

Bank ID	Years of operations (MEAN)
Stanbic Bank Uganda Limited	3.00
Equity Bank Uganda Limited	3.00
Absa Bank Uganda Limited	3.00
Bank of Africa Uganda Limited	3.00
DFCU Bank	3.00
Centenary Bank	3.00
Diamond Trust Bank	3.00
Housing Finance Bank	3.00
KCB Bank Uganda Limited	3.00
Opportunity Bank Uganda Limited	3.00
PostBank Uganda	3.00
Standard Chartered Uganda	3.00
Tropical Bank	3.00
United Bank for Africa	3.00
NCBA Bank Uganda	3.00
I&M Bank Uganda	3.00
Finance Trust Bank	3.00
Ecobank Uganda	3.00
Citibank Uganda	3.00
Exim Bank	3.00
Guaranty Trust Bank	3.00
Cairo Bank Uganda	3.00
Bank of India Uganda Limited	3.00
ABC Bank Uganda Limited	3.00
Bank of Baroda Uganda Limited	3.00

Source: primary data

All the banking firms had been in operations for more 10 years as indicated in the table above.

4.3 Correlation analysis

Pearson's Correlation coefficient was used to determine the degree of association between the study variables. Results of the correlation tests in line with the study objectives are presented in Table 4.8 below.

Table 4.8: Correlation results

ITEM	1	2	3	4	5	6	7	8	9
BUSINESS PROCESS REDESIGN (1)	1								
Organization Resources (2)	.869**	1							
Innovative Thinking (3)	.820**	.601**	1						
Process Function (4)	.655**	.437**	.432**	1					
FINANCIAL RESILIENCE (5)	.445**	.449**	.329**	.086	1				
Robustness (6)	.532**	.522**	.418**	.178	.855**	1			
Adaptability (7)	.297**	.308**	.154	.053	.822**	.512**	1		
Flexibility (8)	.409**	.408**	.352**	.034	.889**	.725**	.607**	1	
BUSINESS PERFORMANCE (9)	.558**	.596**	.373**	.356**	.538**	.476**	.463**	.496**	1

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

Source: primary data.

4.3.1 Relationship between business processes redesign and business performance

Table 4.8 above revealed that there is a positive and significant association between business processes redesign and business performance of commercial banks in Kampala ($r=0.558$, $p \leq .01$). This implies that any positive change in business processes redesign is associated with a change in the performance of commercial banks in Kampala. Adding up, all the dimension of business processes redesign including organization resources ($r=0.596$, $p \leq .01$), innovative thinking ($r=0.373$, $p \leq .01$) and process function ($r=0.356$, $p \leq .01$) have a positive relationship with business performance of commercial banks in Kampala.

4.3.2 Relationship between business processes redesign and financial resilience

Table 4.8 above indicated that there is a positive and significant association between business processes redesign and financial resilience of commercial banks in Kampala ($r=0.445$, $p \leq .01$). This means that a unit change in business processes redesign is associated with a change in the financial resilience of commercial banks. Furthermore, all the dimensions of business processes redesign including organization resources ($r=0.449$, $p \leq .01$), innovative

thinking ($r=0.329$, $p\leq.01$) and process function ($r=0.086$ $p\leq.01$) had a positive relationship with financial resilience of commercial banks.

4.3.3 Relationship between financial resilience and business performance

Table 4.8 above revealed that there is a positive and significant association between financial resilience and business performance of commercial banks in Kampala ($r=.538$, $p\leq.01$). This means that a unit change in financial resilience is associated with a change in the business performance of commercial banks in Kampala. Furthermore, all the dimensions of between financial resilience including robustness ($r=.476$, $p\leq.01$), adaptability ($r=.463$, $p\leq.01$) and flexibility ($r=.496$, $p\leq.01$) have a positive significant relationship with business performance of commercial banks in Kampala.

4.4 Regression analysis

The regression analysis model was used to test the effect of the predictor variables on the dependent variable. This was done to determine the extent to which the predictor variables (business processes redesign and financial resilience) impact on the dependent variable (business performance). That is, the percentage change in the dependent variable accounted for by the changes in the independent variable. Regression findings are presented table 4.9.

Table 4.9 Multiple Regression model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	25.877	2.704		9.571	.000
Business Process Redesign	.286	.066	.398	4.350	.000
Financial Resilience	.228	.058	.361	3.953	.000
Model summary					
R	.645				
R Square	.417				
Adjusted R Square	.403				
Sig.	.000				

a. Predictors: (Constant), Business Process Redesign, Financial Resilience

b. Dependent Variable: Business Performance

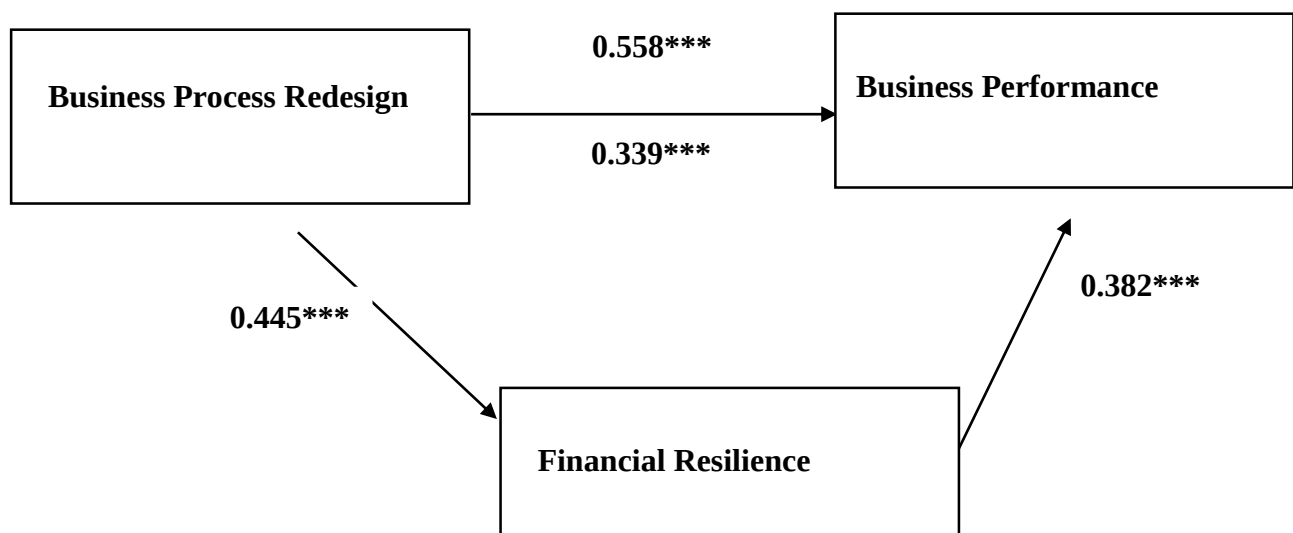
Source: Primary Data

Multiple regression analysis was used to determine the combined effect of predictor variables on the dependent variable. Regression findings in table 4.9 above revealed that a combination of business process redesign and financial resilience predicated up to 40.3% (adjusted R square = 0.403) of the observed variance in business performance of commercial banks in Kampala. Business Process Redesign was found to be the most significant predictor of performance of commercial banks in Kampala. (Beta = 0.398, Sig = .000). This means that business process redesign contributes 39.85% of the change in business performance of commercial banks in Kampala. Financial resilience was observed to be the least significant predictor of business performance (Beta = 0.361, Sig = .000). This means that financial resilience contributes 36.1 % of business performance of commercial banks in Kampala.

4.5 Mediating role of financial resilience

To test the mediation of financial resilience on the relationship between business processes redesign and business performance as the fourth objective, Sobel test was conducted in this study to establish the nature of mediation and the extent to which financial resilience influence relationship between business processes redesign and business performance. The tests of mediation were carried out and met using Med Graph program developed by Jose (2004) based on works of Field (2006); Baron and Kenny (1986) and results are showed below;

Type of mediation	Significant
Sobel z-value	4.608476
<u>Standardised Coefficients</u>	
Total:	0.558
Direct:	0.339
Indirect:	0.17
Indirect to Total ratio	0.304



Mediation results in the Figure above reveal that when financial resilience was added, it reduced the relationship between Business processes redesign and business performance from 0.339 to 0.17 but it remained significant. This implies that financial resilience has a partial mediation effect on the relationship between Business processes redesign and business performance. Thus, Business processes redesign can directly influence business performance without going through financial resilience but the effect is more if it goes through financial resilience. From the model above, financial resilience as a mediator contributes 17% in the model.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter is comprised of the discussion of findings, conclusion, recommendations, areas for further research and limitations of the study. Research findings are discussed based on the study objectives while drawing comparison between the findings and literature review.

5.1 Discussion of findings

5.1.1 Relationship between business processes redesign and business performance

The findings showed a positive and significant association between business processes redesign and business performance of commercial banks in Kampala. The results of the regression analysis indicated that business processes redesign is the most significant predictor of business performance of commercial banks. This implies that commercial banks in Kampala-Uganda that allows and encourages unpopular ideas in the activities within the organization and believe that innovative rethinking strengthens employees' ability to perform tasks in an efficient manner through knowledge sharing will increase employee royalty, improve public image, attract many customers and increase market share. Furthermore, commercial banks that develop new products to meet the public demand or needs and have made improvements in their overall process flows as institutions are most likely to increase cash inflows, increase payment of their workers and improve their return on investment and efficiency of business operations.

This finding is consistent with Fetais et al. (2022) who indicated that business process redesign approach thoroughly reshapes a business's practices to achieve better overall performance in terms of costs, quality of service, speed, and proficiency. This is supported by Harmon and Garcia (2020) and Beverungen et al. (2020) who concluded that adopting and transforming business processes is essential for organizations to cope with increasing

competition and customer expectations especially in a hyper-connected world. Furthermore, business process redesign improve productivity and relationships with customers, and reduce time to launch new products and services in terms of cost, quality, customer satisfaction and shareholders' value by identifying and redesigning the important processes of the firm (Akam, Okeke, Kekeocha & Onuorah, 2018). Several studies have confirmed the efficacy of business process reengineering in influencing organizational performance in various sectors like educational sector (Herminawaty, 2016), banking sub-sector (Husameddin & Mohammad, 2018); Akam et al., 2018)

Additionally, the findings of this study agree with Olajide and Okunbanjo (2020) who concluded that when organizational resources, innovative thinking and process function are combined together as business process reengineering components, they enhance organizational performance in the food and beverages industry in Nigeria. The study suggested that Food and Beverages firms should continue to formulate policies that will encourage innovative ideas from all stakeholders of the organizations in order to continue to achieve competitive advantage and experience sound operational performance. Furthermore, the sustainability of many business organizations depends on the adoption of new means that ensure the organization's survival when faced with increasing global or even local competition. This is often achieved by adopting business process re-engineering as a proposed strategy to enhance the organization's success (Fetais et al., 2022). Hence, business process redesign is a central part of business process management and is supported by several business process management capabilities in the digital age (Kerpedzhiev et al., 2020). Because of their strategic importance, process redesign projects may entail large human and technical investments but may also yield substantial returns (Huang et al., 2015). The findings are supported by the complexity theory which encourages innovative thinking and real-time responses to change by allowing business units to self-organize.

5.1.2 Relationship between business processes redesign and financial resilience

The findings revealed a positive and significant association between business processes redesign and financial resilience of commercial banks in Kampala. This implies that commercial banks that always come up with new ideas of production processes and service delivery and integrate better techniques in their functionality will always recovered from external shocks and have adequate controls against most of the foreseeable risks. More still, commercial banks that always reinvent the way work is done to meet the current business demand and are able to simplify its methods towards ensuring that results are achieved will continuously embrace innovations that present chances of making them better institutions. As a result, the management finances will be aimed at adapting to the environment as opposed to resistance to change.

This finding agrees with the previous studies which established a strong and significant associated between outcomes of business processes redesign and financial resilience. For instance, a recent study found out that business process redesign is an essential ingredient for all businesses since they are operating in a very volatile business environment, with the globalization making it more increasingly challenging (Olajide & Okunbanjo, 2020). This is supported by Hasan et al. (2021) who concluded that business process redesign allows businesses to redesign their processes to be more flexible, responsive, and adaptable to changing market conditions. This agility helps organizations quickly adjust their operations, seize new opportunities, and respond effectively to economic disruptions, thereby enhancing their financial resilience. Additionally, the findings of Leyh et al. (2021) agree with the study finding in such a way that business process redesign facilitates the identification and mitigation of risks within business processes. By analyzing and redesigning processes to incorporate risk management measures, organizations can proactively address vulnerabilities

and minimize potential financial losses. This contributes to improved resilience against unexpected events and economic downturns (Leyh et al., 2021).

Furthermore, a past study by Ahmed and Hossain (2021) found that business processes redesign can help businesses to improve their financial resilience by improving their operational efficiency and reducing their costs. The study found that business processes redesign can lead to a significant increase in profitability and a decrease in risk exposure. This is supported by Dubey and Dwivedi (2020) who established that business processes redesign can help businesses to improve their financial resilience by increasing their agility and adaptability. The study found that business processes redesign can help businesses to respond more quickly and effectively to changes in the market and the competitive landscape. This can help businesses to avoid financial losses and protect their bottom line.

5.1.3 Relationship between financial resilience and business performance

The findings revealed a positive and significant association between financial resilience and business performance of commercial banks in Kampala. Also, the results of the regression analysis indicated that financial resilience is a significant predictor of business performance of commercial banks. This implies that commercial banks that respond to market movements more quickly and efficiently and are ready to release finance to fund various campaigns aimed at attracting more business to them will always venture into businesses that yield high profits. As a result, this will attract more sales and obtain a competitive advantage over their competitors, hence increasing business performance. Additionally, commercial banks that flexible enough to protect the bank but still allow for pursuit of opportunities and always have their finance in circulation aimed at generating more cash flows will always come up with many products which satisfy customer needs. This reduces complaints from customers which improves public image of the banks.

This finding agrees with the previous studies of Fiksel et al. (2015) who revealed that the capacity for resilience is necessary for business performance especially in markets characterized by sudden shocks. This is because capacity for resilience enables an organisation to take appropriate actions and transformations in response to unanticipated events that potentially threaten its continued existence. This is supported by Santoro et al. (2020) who indicated that resilience is positively associated with their perception of business success. Hence, resilient organisations are able to cope with such uncertainties by increasing the likelihood of tolerating risks and adjusting environmental inputs (Del Giudice, Carayannis & Maggioni, 2017).

Additionally, the finding of this study agree with Alghalith and Lahiani (2020) who investigated the impact of financial resilience on the performance of European banks during the COVID-19 pandemic. The results showed that banks with higher financial resilience were able to maintain their performance and financial stability during the crisis. This is in line with Luo et al. (2021) who concluded that financial resilience positively impacts firm performance in the banking industry. Also, a study by Khan et al. (2020) examined the impact of financial resilience on the performance of small and medium-sized enterprises (SMEs) in Pakistan and findings showed that financial resilience positively affects SME performance, and this effect is more significant for firms operating in highly uncertain environments. This is in agreement with Cheng et al. (2020) who confirmed that financial resilience has a positive impact on firm performance. This is supported by Reimann et al. (2020) who concluded that financial resilience positively affects firm survival, and this effect is stronger for firms that face higher financial risks.

5.1.4 The mediating role of financial resilience

The findings on the mediating role of financial resilience revealed that financial resilience plays a partial mediation on the relationship between business process redesign and business

performance of commercial banks. This means that financial resilience is a conduit through which business process redesign partly predicts business performance of commercial banks.

In the existing literature, there is a limited body of research specifically investigating the mediating role of financial resilience between business process redesign and business performance. It can be inferred that financial resilience may act as a partial mediator in this relationship. However, the few existing studies in line with our study findings agree that business process redesign initiatives that enhance operational efficiency, cost optimization, risk management, and agility can contribute to improved financial resilience (Hasan et al., 2021; Leyh et al., 2021). This, in turn, can positively influence various dimensions of business performance.

5.2 Conclusion

This study was designed to answer four research questions and this section summarizes the key findings of the study in relation to each research objective in order to formulate the recommendations of the study;

Based on the results of the study, it can be concluded that there is a significant association between business process redesign and business performance of commercial banks in Kampala. Thus, commercial banks need to encourage unpopular ideas in the activities within the banks and they should believe that innovative rethinking strengthens employees' ability to perform tasks in an efficient manner through knowledge sharing. Business process redesign which include organization resources, innovative thinking and process function is essential for improving business performance.

From the study findings, it is can be concluded that commercial banks respond to market movements more quickly and efficiently and are ready to release finance to fund various campaigns aimed at attracting more business to them. Regression results indicated financial

resilience is a significant predictor of business performance. Thus, commercial banks need to be flexible enough to protect themselves and still pursue other opportunities. This will increase cash flows hence improving business performance.

It is also concluded that financial resilience plays a mediating role on the relationship between business process redesign and business performance.

5.3 Recommendation

From the study findings and conclusions the researcher recommends;

Commercial banks should endeavor to emphasize and foster a culture of continuous improvement in their operations. This can be achieved through encouraging employees to identify and suggest process enhancements regularly, allowing for ongoing refinements that can further optimize performance.

Commercial banks should invest highly in business redesign initiatives for-example emphasis should be put on technology and automation. This is because technology plays a vital role in driving process efficiency and effectiveness. Banks can achieve this by acquiring modern technologies such as robotic process automation, artificial intelligence and data analytics to automate repetitive tasks, streamline workflows, and improve decision-making processes.

Furthermore, commercial banks should strengthen their risk management practices. This can be done by incorporating robust risk management measures into the redesigned processes. They need to assess and address potential risks, including operational, credit, liquidity, and market risks. Implementing effective risk monitoring and mitigation strategies enhances the bank's ability to withstand financial shocks and disruptions.

Commercial banks need to diversify revenue streams by exploring opportunities to diversify the bank's revenue sources. Redesigned processes can help identify new market segments, product offerings, or services that can contribute to additional revenue streams. This

diversification can reduce reliance on a single revenue source and enhance financial resilience by spreading risk.

Commercial banks should develop and implement a comprehensive financial resilience framework. This framework should include policies and procedures for identifying, assessing, managing, and mitigating financial risks. The framework should also be regularly reviewed and updated to ensure that it is aligned with the bank's current business strategy and risk landscape.

5.4 Areas for further study

Future research should investigate other factors that predict business performance apart from financial resilience and business process redesign.

Given the time factor, it was not possible for the researcher to carry out the study beyond study scope in terms of time, geography and subject, therefore there is need for longitudinal studies in this context to contribute in the academic literature concerning business process redesign, financial resilience and business performance.

The study was carried out only in commercial banks in Kampala, therefore, there is need to carry out a similar study in other districts as well as sectors in Uganda.

Future researchers could also add another variable in the conceptual framework and study the statistical relationship. The conceptual model in this study offered a direction to future researchers to a new passageway for discovering this important relationship and perhaps construct a new view.

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MAKERERE UNIVERSITY BUSINESS SCHOOL
QUESTIONNAIRE

Dear respondents,

I am a master's student carrying out a study on business processes redesign, financial resilience and business performance of commercial banks in Kampala, Uganda which is a requirement for the award for a master in Business Administration. You have been selected to participate in this study because of your knowledge and experience. There is no right and wrong answer, but your opinions are important. The data being collected is only for academic purposes and will highly remain confidential. Your participation is highly appreciated.

SECTION A: RESPONDENTS' CHARACTERISTICS

Please tick the appropriate box for the items below;

1. Gender Male ☐ Female ☐

2. Age bracket

18-24	25-29	30-34	35-39	40 & above
1	2	3	4	5

3. Level of Education

Certificate	Diploma	Bachelor's	Masters	PhD	Others (specify)
1	2	3	4	5	6

4. Experience in business

Less than 2 years	2 – 5 years	6 – 10 years	above 10 years
1	2	3	4

5. Designation

Operations manager	Branch manager	Accounts manager	Others
1	2	3	4

SECTION B: FIRM CHARACTERISTICS

6. Years in operation.

Less than 5 years	5-9 years	Above 10 years
1	2	3

7. Number of employees

Fewer than 5	5-49	Above 50
1	2	3

SECTION C

This section focuses your feedback towards the indicated study statements guided as; Strongly agree (SA)= 5, Agree (A)=4, Not sure (NS)=3, Disagree (D)=2 and Strongly disagree (SD)=1. Kindly indicate the extent to which you agree or disagree to the following statements by ticking in the suitable box.

BUSINESS PROCESS REDESIGN

Code	Organization Resources					
P1	There is adequate technology infrastructure and they are used to achieve organizational objectives	1	2	3	4	5
P2	This firm facilities are maintain from time to time	1	2	3	4	5
P3	This firm has adequate equipment and structures in good condition to meet its mandate	1	2	3	4	5
P4	We have integrated better techniques in our functionality.	1	2	3	4	5
P5	The whole delivery system for our services is enhanced for better results.	1	2	3	4	5
	Innovative Thinking					
P6	This firm allows and encourages unpopular ideas in the activities within the organization	1	2	3	4	5
P7	Innovative rethinking strengthens employees' ability to perform tasks in an efficient manner through knowledge sharing	1	2	3	4	5
P8	This firm does develop new products to meet the public demand or needs	1	2	3	4	5
P9	The management always come up with new ideas of production processes and service delivery	1	2	3	4	5
P10	We have made improvements in our overall process flows as an institution.	1	2	3	4	5
	Process Function					
P11	This firm has a system that is open to change in its methods of operation	1	2	3	4	5
P12	This firm has been able to simplify its methods towards ensuring that results are achieved.	1	2	3	4	5
P13	This firm always reinvented the way work is being done to meet the current business demand	1	2	3	4	5

SECTION D

This section focuses your feedback towards the indicated study statements guided as; Strongly agree (SA)= 5, Agree (A)=4, Not sure (NS)=3, Disagree (D)=2 and Strongly disagree (SD)=1. Kindly indicate the extent to which you agree or disagree to the following statements by ticking in the suitable box.

FINANCIAL RESILIENCE

Code	Robustness					
R1	Our institutions have always recovered from external shocks.	1	2	3	4	5
R2	There is reserve staff to cater for any operational emergencies in our institution.	1	2	3	4	5
R3	We have adequate controls against most of the foreseeable risks.	1	2	3	4	5
R4	Our institution has grown to build institutional capacity to resume operations immediately after any shock.	1	2	3	4	5
	Adaptability					
R5	As an institution, we have capacity to pursue any viable opportunity that can emerge in our industry.	1	2	3	4	5
R6	We have adequate financial reserves to explore alternatives of serving our clients better.	1	2	3	4	5
R7	We continuously embrace innovations that present chances of making us a better institution.	1	2	3	4	5
R8	Our management finances moves aimed at adapting to the environment as opposed to resistance to change.	1	2	3	4	5
	Flexibility					
R9	We respond to market movements more quickly and efficiently.	1	2	3	4	5
R10	are ready to release finance to fund various campaigns aimed at attracting the business to our institution.	1	2	3	4	5
R11	Our financial decisions a flexible enough to protect the bank but still allow for pursuit of opportunities.	1	2	3	4	5
R12	Our finance as an institution, apart from the mandatory reserves, is always in circulation aimed at generating more cash flows.	1	2	3	4	5

SECTION E

This section focuses your feedback towards the indicated study statements guided as; Strongly agree (SA)= 5, Agree (A)=4, Not sure (NS)=3, Disagree (D)=2 and Strongly disagree (SD)=1. Kindly indicate the extent to which you agree or disagree to the following statements by ticking in the suitable box.

BUSINESS PERFORMANCE

CODE	Business performance					
	Please indicate your best estimate of your business' position on average relative to that of close competitors over the past two years.					
BS1	The growth of our sales has increased	1	2	3	4	5
BS2	The cash inflows in our business are increasing		2	3	4	5
BS3	Return on investment has greatly improved over the years.	1	2	3	4	5
BS4	Our market share has greatly increased over the past years	1	2	3	4	5
BS5	Our customers have been increasing	1	2	3	4	5
BS6	Our public image has greatly improved	1	2	3	4	5
BS7	Employee royalty is high in our business	1	2	3	4	5
BS8	We have few or no complaints from customers	1	2	3	4	5

BS9	Our business is in a better position to compete with others	1	2	3	4	5
BS10	Our business has many products or services on the market	1	2	3	4	5
BS11	The efficiency of our business has greatly improved over the years	1	2	3	4	5
BS12	Payments to our workers has greatly improved	1	2	3	4	5

Thank you for your time and feedback!

Sample Size Table

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970