THE MODERATING EFFECT OF BUSINESS INTELLIGENCE ON THE
RELATIONSHIP BETWEEN ORGANIZATIONAL CHARACTERISTICS AND THE
ORGANIZATIONAL PERFORMANCE OF DEPOSIT-TAKING SAVINGS AND
CREDIT COOPERATIVE SOCIETIES (SACCOS) IN NAIROBI CITY COUNTY,
KENYA

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BUSINESS ADMINISTRATION (STRATEGIC MANAGEMENT) OF KENYATTA

UNIVERSITY

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# **DECLARATION**

This research proposal is my original work and has not been presented for a degree in any other University. No part of this research project may be reproduced without prior authority from the author and/ or Kenyatta University.

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# **DEDICATION**

May the mighty name of Jesus Christ be praised forever, for consistently guiding my mind and zeal in producing this work. Without you it would have been impossible. That is why I wholeheartedly dedicate this work to you. Thank you Jesus for using my supervisor, family members and friends in providing me the knowledge, unconditional material and immaterial resources to successfully conceive and finish this thesis.

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#### ABBREVIATIONS AND ACRONYMS

**ANOVA** Analysis of Variance

**ATM** Automated Teller Machine

**BI** Business Intelligence

**BPO** Business Process Orientation

**CBK** Central Bank of Kenya

**CRM** Customer Relationship Management

**DT Sacco** Deposit Taking Sacco

ETL Extract, Transform and Load FOSA Front Office Service Activity

**GDP** Gross Domestic Product

**IBM** International Business Machines Corporation

ICA International Cooperative Alliance

ICT Information and Communications Technology

IT Information Technology

**Kshs** Kenyan shillings

MBA Master of Business AdministrationMFI Monitoring Financial Innovations

MS Microsoft

NACOSTI National Commission of Science, Technology

RBV Resource Based View
ROA Return on Assets
ROI Return on Investment

SACCOs Savings Societies Regulatory Authority
SASRA Sacco Societies Regulatory Authority
SMEs Small and Medium-sized Enterprises

**SPSS** Statistical Package for the Social Sciences

SSA Sacco Societies Act

TTI Technical Training Institute
WOCCU World Council of Credit Unions

#### OPERATIONAL DEFINITION OF TERMS

**Business intelligence** 

It is a technologized process for data analysis that consequently provides actionable information to the management in order to make constructive business decisions.

Organizational performance

It is the results that the organization has been able to achieve against what it has earlier planned to achieve.

Organizational structure

Described as the allotment of obligation and force, just as the execution of work activities among authoritative individuals. It turns out to be more applicable when it lines up with the association's goal mission, serious climate, and assets.

Organizational culture

The set of values and ideas, expectations, and activities that govern and inform all team members' experiences.

Organizational strategy

It's a long-term plan that acts as a guide on how a firm can realize its goals through specifying how it will manage its resources to support its business activities.

#### **ABSTRACT**

Deposit-taking credit cooperatives and other commercial should deliberately position themselves to all the more likely serve their clients and support a strategic advantage in the present cutthroat worldwide market. To acquire an upper hand, the financial sector has focused on Business Intelligence to improve organizational performance. Therefore, the overall aim that was to probe the moderating effect of business intelligence on the relationship between organizational characteristics and the organizational performance of deposit-taking savings and credit cooperative societies (Saccos) in Nairobi City County, Kenya. The study particularly inquired how business intelligence moderates the influence of corporate strategy, structure, culture and business process on the performance of Saccos in Nairobi County, Kenya. The research was conducted using a descriptive design method. The study populace included all 38 deposit-taking Saccos in Nairobi County. To choose research participants, the study utilized a proportionate random sampling technique. Participants were given self-administered questionnaires to provide data. The completed self-administered questionnaires duly filled were coded as figures and descriptive analysis was used to describe the perceived level of corporate strategy, structure, culture, business process and organizational performance of Saccos in Nairobi County, Kenya. Pie charts and tables were used to display the findings. Inferential analysis was carried out using multiple linear regressions to investigate the correlation between business intelligence (BI) and organizational performance. The findings observed that corporate strategy, structure, culture and business process considerably impacts the performance of Saccos in Nairobi County, Kenya in a positive manner. As a result, the BI systems must be properly linked with the organization's business strategy and core competencies in order to fulfill their full potential in planning effectiveness.

#### CHAPTER ONE INTRODUCTION

#### 1.1 Background of the Study

As global market demands shift to consumer expectations, business leaders are looking to find innovative ways to meet these diverse needs. Organizations must influence the ever-changing conditions around as the competitive environment becomes increasingly dynamic. Management ability to make intelligent choices has a substantial influence on an establishment's overall success and survival. The ultimate objective of every business is to eliminate redundancies, decrease costs, and supply goods and services effectively and reliably; hence, the shift to Business Intelligence (BI) plays an increasingly significant role in decision making, leading to improved performance (Ramakrishnan et al., 2012). The integration and collaboration of corporate information and knowledge management systems have helped build and grow exceptional organizational performance in recent years.

Deployment of BI frameworks within enterprises to further develop the achievement of important and dynamic objectives within enterprises, also due to the fact that the excellent organization of information has made it a popular innovation among academics and professionals (Owusu, 2017). Human resources in a variety of roles use a range of BI system components to manage operations by accessing and exploring organizational data, which improves operational efficiency. Businesses can also use the BI system to find new and better opportunities and restructure their operations. Organizational performance has recently become a currency and, as a result, there is an inevitable push towards adopting BI solutions. Saccos must position itself strategically to grow effectively, maintain a competitive advantage and thrive in today's competitive but difficult economy. Saccos in Kenya must start looking at new profitable business strategies as a result of these developments if they are to prosper. That is why this study is motivated to establish how the business intelligence factors affects the organizational performance of Saccos in Nairobi County, Kenya. With the scope of business intelligence systems being business process, corporate strategy, organizational culture and structure.

# 1.1.1 Organizational Performance

Performance is the result that the organization has been able to achieve benchmarked against what it had earlier planned to achieve or realize (Achieng, 2014). The ultimate goal of any organization is to compete and thrive in a rapidly changing business environment, achieving sustainable competitive advantage. To achieve this, organizations must be flexible to the dynamics of the market environment and develop comprehensive processes that allow them to adopt a variety of approaches (Khashman, 2019). While the most important assumption in the evaluation of companies, their operations and their context is performance, mastering the concept of organizational performance has long been a priority for academia (Kinyua, 2015). The capacity of an enterprise to fulfill its goals while efficiently utilizing its resources is referred to as organizational performance (Daft & Marcic, 2015). It is the overall productivity of a company, taking into account stock sales, profits, customers and market share (Mutindi, Namusonge & Obwogi, 2013).

Despite the fact that performance is frequently mentioned in management literature, there is no widely recognized definition or metric for this notion. Profitability, revenue growth, market share, new product launches, ROA, ROI, and customer satisfaction are critical performance metrics for enterprises (Neely et al., 1995). Existing documents that are evaluated improve performance by providing decision makers with enough factual information to help them make informed organizational decisions. Companies ma utilize BI systems to preserve, extract, and study information about their operations, improving strategic decisions and competing more effectively (Bao, 2015). Organizational activities include a wide range of well-documented components. Ankrah et al. (2009) argues that one of the fundamental constituents impacting organizational performance is strategy and organizational policies such as decision-making style. Organizational structure is fundamental to allocate resources, increase market share and improve business performance (Pertusa Ortega et al., 2010).

Li and Tan (2013) found in their studies that by combining organizational leadership and strategic direction, productivity increases. The imperative to rethink key functionalities with strategic goals has received little attention from management professionals, even though it is

relevant in shaping an organization's overall strategy (Li & Tan, 2013). Thus, the research attempted to probe how Business Intelligence affects the organizational performance of Saccos in Nairobi County, Kenya, using profitability, cost reduction, operational efficiency and market share as measures.

#### 1.1.2 Business Intelligence (BI)

Howard Dresner pioneered the field of Business Intelligence (BI) in 1989 as the set of theories and techniques that underpin business decision making using evidence-based support systems and electronic databases (Rouhani, 2012). BI is a series of related systems and a decision-making feature that enables enterprises to efficiently access corporate data (Gichobi, 2015). BI focuses on the systems, platforms, tools, and technologies that support business data analysis, data interactions, and trends. Business Intelligence (BI) helps organizational leaders better understand their business and make more informed, real-time decisions.

Gansor et al. (2010) redefines BI as an investigative process of turning internal and external data into actionable information. BI was coined to denote the acquisition, preservation, examination, and transmission of information that will assist a company's decision-making process (Seufert & Oehler, 2009). BI is a broad concept that encompasses a wide variety of system. These subsystems capture, examine, synthesize, and display data from the operating system (Chamoni and Gluchowski, 2004). These subsystems collect, analyze, interpret, and display data from the operating system (Chamoni and Gluchowski, 2004).

BI is used to describe a process as well as a product. Products include information to help businesses better understand customers, suppliers, competitors, markets, and other drivers of competition. Processes include the methods used by organizations to gain valuable information that enables them to compete and succeed in today's dynamic business environment (Wixom & Watson, 2010). Thus, BI is a mix of acquiring, examining, and consolidating data from multiple foundations and reporting the results in a way that might enhance a company's performance (Karim, 2011).

BI uses systems, models, future market direction, innovation and the environment to understand the essential skills of an association, to filter out competition, the activities of competitors and the consequences of those activities. BI refers to data frameworks that coordinate the elements of agreement, presentation, governance and support to transform information into data (Nyabuti, 2019). Organizations can use BI to combine information and experiences to increase revenue or potentially reduce costs. Likewise, it helps organizations work with limited resources and control them effectively (Williams & Williams, 2010). BI includes obligations and practices to collect, prepare and review information from multiple sources to help associations make ideal and fundamental choices that will help them achieve their goals (Mohaghar, 2008). In addition, Business Intelligence (BI) can provide leaders with the ability to refine and follow authoritative exercises, and can serve as the basis for effective management decisions.

According to Otieno (2017), business executives worked with Kenyan Sacco to manage risk and consistency, further develop execution capabilities, develop markets, further develop understanding Know your customers, analyze channel productivity, drive product engineering, achieve functional excellence, and value their advantages. Saccos had the opportunity to assess the vast amount of information they had with the advancement of BI appliances, enabling them to make better decisions. They will have the opportunity to assess the benefits and pitfalls, such as business investigations, board crusades, sector testing and risk controls, if they have BI capabilities (Otieno, 2017). Kenya's currency area seeks to recognize assets, expand choice, improve security, and forecast availability. The advent of business analysis frameworks has become a major factor of recognition and growth as digitization becomes a major focus and monetary institutions strive to update their activities to maintain a coherent decision-making process. Success relies on diversity, supported by the ability to more easily assess and transform information into data in a market characterized by intense competition, standardization and strict and relentless standards. This analysis recognized the authoritative process, hierarchical structure, hierarchy cycle and culture of authority as important elements of business intelligence for a decentralized application that is further developed based on assumptions. This inquiry probed how business intelligence affects the organizational performance of Saccos in Nairobi County, Kenya.

Organizational strategy and corresponding BI framework are inextricably linked. This is due to the viability of business intelligence frameworks that act as mediators between strategy and implementation of an organization. The major aim of embracing BI frameworks is to give greater and up-to-date pertinent information to management so that they can make key decisions that allow the business to develop. Project coordination and planning are supported by advancements in BI, creating projects in line with organizational goals. Internal and external data is transformed by BI into information that can be used as an analytical tool, helping to improve decision making. Combine operational data with analytical tools that provide management with competitive insights. Therefore, researchers consider business intelligence to be a core skill (Brinkmann, 2015). For optimal organizational performance, there must be a match between business strategy and IT.

Organizational structure is an important factor in improving the business intelligence system. Organizational structure, according to Robbins (2014), is a framework that governs the formal division, interdependence, and integration of activities and responsibilities inside a company. The behavior of the individuals and groups that make up the company is inspired by the use of organizational structure. Arefin et al. (2015) conducted an empirical investigation showing that autonomous structures and the rapid transfer of information to senior management make BI systems more effective in influencing organizational performance. A decentralized structure ensures organizational success by allowing efficient and quickly executed choices in the procedural phase (Andersen & Segars, 2001). Because process, customer, and support data is given to the organization's management without blockage or delay, the matrix method makes the BI system more efficient and has an impact on the firm's success.

Organizational/business process is a mechanism that converts inputs into outputs. It is the process of using organizational resources to achieve goals in a predictable, repeatable and systematic way. When IT is integrated into organizational processes, it creates a synergistic impact that improves organizational capabilities. To better align the IT infrastructure with the specific operations of the organization, the BI system may require process redesign. The integrated process between customers and suppliers helps companies' process supply and demand data, improve data matching skills efficiently and increase financial strength (Barua et

al., 2004). The IT base, customers, suppliers, and industry of an organization are truly the foundation of BI frameworks, integrated to improve an organization's operations. Organizational performance is closely related to the integration of BI frameworks within an organization. Therefore, improving organizational activities can have an impact on business performance.

The ideals that employees live and embody as a workplace in an organization are linked to organizational culture according to Schneider et al. (2013). These ideals influence the way employees behave and adapt to achieve organizational goals. Culture, as reported by Denison et al. (2003), there are four dimensions: commitment, flexibility, mission and consistency. BI systems, according to Arefin et al. (2015), determined that an organization's performance is significantly influenced by organizational culture. System performance affects organizational efficiency, which in turn affects the old functioning of the corporate culture. Thanks to the awareness and shared values of the members of the organization that create a supportive and sustainable environment, with the free keeping of supplier records and the blocking of customers in the hierarchy of organizations and special operations departments, the company benefits from decisions faster production, reduced problems and improved performance.

# 1.1.3 Business Intelligence in SACCOs in Kenya

The financial services sector is constantly evolving, provoking enterprises to rethink their strategy in light of factors like as internationalization, liberalization, mergers & acquisitions, competitiveness, competition from non-financial organizations, and technological innovation. Indeed, the focus of the financial sector has shifted from fraud detection and risk management to customer relationships and asset protection. Due to growing competition and rapid business transformation, Saccos is forced to adopt the BI system. According to studies, Bi-System adoption depends on many factors that can be costly, in addition to a complex business that needs significant infrastructural facilities overtime. According to the main financial growth indicators, the recent mechanical phenomenon of Saccos is favorable. Unlike the banking sector, pragmatic development has occurred with limited technical support. However, the market is increasingly relying on technology prowess and innovation to digitally redesign and deploy technology to meet the growing needs of buyers and improve customer experience.

Kenyan Sacco Banking Association approved business intelligence frameworks only in 2021, signaling the arrival of Saccos' journey towards digital transformation. This breakthrough allows Saccos to continue to develop a mature digital transformation model where analytical information will be used to create business use cases for a new generation of value, improve member engagement and experience. Data from Sacco's source systems will be collected, ETL executed and information stored in report-level tables ready for analysis, viewing and reporting. Saccos is committed to using data-driven reporting and the BI decision framework to improve business processes, empower employees, improve member services and increase operational efficiency.

# 1.1.4 Savings and Credit Cooperative Societies (SACCOs) in Kenya

The country's performance in the SACCO subsector is considered one of the best in the region (Maina, 2018). The World Credit Union Council (WOCCU) ranked the SACCO subsector as the fastest growing sector in the world in July 2013, accounting for 5% of Kenya's GDP. According to the Administration of the SACCO Association, this subsector has grown exponentially at an average annual rate of 30% (SASRA). In Kenya, the SACCO sector includes both registered and unregistered SACCO. Since 2008, SACCO's have been certified by the SACCO Associations Regulatory Authority (SASRA), regulated and regulated and incorporated under the Financial Cooperation Associations Act (CAP 90) under the SACCO Association Act (Mumanyi, 2014). The cooperative commissioner manages Saccos by providing office services. According to the report, about 80% of Kenya's population depends in one way or another on Saccos for their livelihood, directly or indirectly. Other companies in the Kenyan financial sector, such as commercial cooperatives, investment banks and investment groups, compete directly with Saccos.

Individuals, small and medium-sized companies (SMEs), and families rely on Saccos to address their investment goals. Individuals are encouraged to save, which leads to the creation or accumulation of new money, which is beneficial to the economic prosperity of the country. To serve non-banks, Saccos have turned to technology, such as depositing and withdrawing cash and opening accounts. This puts Saccos in a better position for success (Moki et al., 2019). They also

spend more time and money on online and mobile banking than ATMs. Financial innovation has benefited customers with quick and easy access to information and services, as well as reducing Sacco's growing overall costs.

Kenya has 172 SACCOs authorized to conduct Sacco storage operations (SASRA, 2019). One of the authorized SACCOs operated under a two-year temporary license, while the other eleven operated under a conditional license. The total assets of 172 DTSACCO increased by 12.1%, from Ksh 95.25 billion in 2018 to Ksh 556.71 billion in 2019. On the other hand, total deposits increased by 11.27%, from Ksh 31.91 billion in 2018 to Ksh 380 billion in 2019, showing that total deposits grew at a slower pace than total assets, up 12.1%. Saccos have evolved over time. The most visible types of Sacco that have emerged in Kenya over the years are actually investment or housing cooperatives, consumer cooperatives, marketing and production cooperatives and Matatu Saccos (SASRA, 2019).

#### 1.2 Statement of the Problem

The competitive landscape in the country among the Sacco has changed dramatically in recent years, from a thriving economy with sufficient credit to a reasonably stable economy. DT-Saccos is currently being driven in ways they never imagined due to constraints such as reduced resources and an increasingly complex technology ecosystem. DT-Saccos must be flexible and responsive to changes in the business environment. As a result, managerial decision support systems are now an essential element in the dissemination of business information, with the potential to increase productivity and competitiveness. DT-Saccos places great value on business intelligence (BI) systems to improve organizational performance, automate interactions with customer and address challenges as multinationals, geographically distributed customers and repositioned to meet customer needs.

In spite of extensive ICT integration, little is known about how and to what degrees business intelligence has facilitated Saccos optimize their organizational performance. Studies on the banking sector's financial performance have been published (Nyabuti, 2018; Kagechu, 2018; Gichobi, 2015; Nderi, 2014). The empirical analysis reveals a conceptual gap, as the majority of

researches have been published in industrialized countries. Ponelis and Britz (2011) investigated the impact of business intelligence on SMEs in South Africa, concluding that, while business intelligence is critical in SMEs, it may be fully utilized with the right assistance and guidance. Rahman (2012) conducted research at Uppsala University on the impact of business intelligence adoption in businesses, finding that it improved enterprises' commercial competitiveness. The absence of empirical evidence of how business intelligence affects the organizational performance of Saccos in Nairobi County, Kenya is a void that must be filled. The link between the variables is difficult to determine as a consequence. These researchers looked at a correlation while taking into consideration the broader context and methodological constraints.

The study was motivated by the realization that, despite integrating ICT systems such as business intelligence (BI) to improve organizational performance and competitiveness, Saccos have failed to achieve the desired results. Moreover, despite the numerous benefits of integrating BI systems in Saccos, research shows that uptake has been slow; Saccos did not begin using BI systems until early this year. This was the cornerstone for this inquiry, which attempts to measure the bearing of BI on Saccos' success in Kenya. The emphasis of this inquiry was to address a research vacuum by evaluating the weight of organizational strategy, organizational structure, business process, and organizational culture on Sacco performance in Nairobi County, Kenya.

#### 1.3 Objectives of the Study

## 1.3.1 General Objective

The overall aim that is to be addressed by this study is to probe the moderating effect of business intelligence on the relationship between organizational characteristics and the organizational performance of deposit-taking savings and credit cooperative societies (Saccos) in Nairobi City County, Kenya.

# 1.3.2 Specific Objectives

The study was motivated to;

- i. To determine if business intelligence moderates the relationship between organizational strategy and the organizational performance of deposit-taking Saccos in Nairobi City County, Kenya.
- To determine how business intelligence moderates the relationship between organizational structure and the organizational performance of deposit-taking Saccos in Nairobi City County, Kenya.
- iii. To establish if business intelligence moderates the relationship between business process and the organizational performance of deposit-taking Saccos in Nairobi City County, Kenya.
- iv. To determine how business intelligence moderates the relationship between organizational culture and the organizational performance of deposit-taking Saccos in Nairobi City County, Kenya.

### 1.3.3 Research questions

- i. Does business intelligence moderate the relationship between organizational strategy and the organizational performance of deposit-taking Saccos in Nairobi City County, Kenya?
- ii. Does business intelligence moderate the relationship between organizational structure and the organizational performance of deposit-taking Saccos in Nairobi City County, Kenya?
- iii. Does business intelligence moderate the relationship between business process and the organizational performance of deposit-taking Saccos in Nairobi City County, Kenya?

iv. Does business intelligence moderate the relationship between organizational culture and the organizational performance of deposit-taking Saccos in Nairobi City County, Kenya?

#### 1.4 Significance of the Study

The research will assist businesses in determining how to use business intelligence involving key effective corporate strategies, business processes, organizational culture and structure to improve performance, creativity, and decision-making. Policymakers from a variety of organizations will be given with information on the advantages of BI in Kenya. By putting the study's findings into practice, they will be able to strengthen responsible policymaking and governance, leading to increased productivity and enhanced achievement. The study provides a leeway for future researchers to use it as a foundation and motivation to carry out more research studies linked to BI and performance in other sectors such the education sector, service sector, IT sector, and manufacturing sector among others.

### 1.5 Scope of the Study

The scope of the study was to probe how BI influences the success of Saccos in Nairobi County, Kenya. The scope of the respondents were those working in 38 deposit-taking Saccos in Nairobi County. The scope of the data collection process of this study was approximately 3 months.

# 1.6 Limitations of the Study

The researched elements were likely to be very busy at their offices and getting them to participate in the study was difficult. Additionally, even though a good number of them agreed to participate in the study, their busy schedule made them delay or not respond at all to the questionnaires given to them. This limitation was resolved by involving the top management to help the researcher convince the targeted employees to partake in the study. Moreover, the researcher followed up with the respondents through phone calls and office visit just to ensure

that they sacrificed some time to respond to the questionnaires. Another limitation was that some information in the questionnaire made some respondents to be reluctant to record their responses. This issue was resolved by obtaining a research permit from NACOSTI together with an introductory letter from Kenyatta University that were used to clarify that any data provided by respondents would only be used for educational purpose and would hence be treated with extreme confidentiality.

# 1.7 Organization of the Study

This proposal contained three main parts, the first one is the Introduction that introduced the concepts and trends revolving around business intelligence and organizational performance through the background of the study. The Introduction also presented the research problem in regard to the context of SACCOs and the literature gaps to be bridged through the problem statement. It also presented the objectives that were going to be addressed, the value of this particular research, the scope and the limitations the researcher encountered with. The second chapter that followed which was the Literature Review involved a thorough revision and synthesis of both theoretical and empirical literature that probed how business intelligence affects organizational performance. The final part of this proposal was the Research Methodology that pinpointed and clearly discussed the research techniques and strategies that were used to address the research objectives.

#### CHAPTER TWO LITERATURE REVIEW

#### 2.1 Introduction

The chapter is unveiled by presenting the theories connected to the phenomena of this study. It then discussed the concepts of business intelligence and performance together with studies conducted to show how the business intelligence dimensions influenced performance. It then closed by presenting the gaps to be bridged and a conceptual framework showing from the business intelligence elements affects organizational performance.

#### 2.2 Theoretical Review

This section pinpoints and brainstorms on the theories, namely, the Resource Based View and the Institutional theories connected to the phenomena of interest of this research inquiry.

### **2.2.1** Resource Based View Theory

The resource-based point of view was popularized by Penrose in 1959 and claims that when a company's assets are under his control exceptional performance is achieved. Wernerfelt then proposed the RBV, which had become famous thanks to the work of Barney (Wernerfelt, 1984). According to RBV theory, the most efficient use of an organization's resources is essential for improving performance and creating sustainable competitive advantage. Early research suggests that to gain significant benefits, these resources must be valuable, scarce, inimitable and irreplaceable (VRIN) (Wernerfelt, 1984; Olzark, 2014). Combine the qualities of resources and capabilities to examine the heterogeneity, performance, and long-term viability of a company's operations.

With a resource-based approach, the goal of internal management efforts is to create a sustainable competitive advantage for the company. According to RBV, a company's ability to achieve its vision is influenced by the resources and skills of the organization, which form the basis for the development of critical skills, according to RBV. Acquiring, configuring, reconfiguring and growing existing resources are all that is needed to establish competitive

advantage and create value. This knowledge-based approach to resources motivates companies to acquire access and hold intangible assets, as these assets are the way companies integrate and transform investment assets, inputs and physical assets. This boost in competitiveness is the culmination of a solid decision-making processes founded on data gathered for decision-making needs. The information an enterprise learns through this process helps to make informed judgments about the competitive tactics the company should employ (Olszak & Ziemba, 2007). Likewise, according to Olszak and Ziemba (2007), a company should continue to examine its operations and business environment even after it has achieved high competitiveness.

Companies have everything to gain from the RBV theory because it allows managers to determine if there are components that contribute to improved performance. Businesses can exploit market inefficiencies to improve their performance. Managers can maintain a competitive advantage by pooling their resources. The RBV hypothesis benefits the company because it identifies the characteristics that contribute to better performance (Locket, Thompson & Morgenstern, 2009). RBV allows bank executives to select the most important strategic components in which to invest from a list of possible strategic components.

According to the RBV model, BI is seen as an intrinsic part of an organization's resources and, as such, is seen as the foundation for understanding the business environment through the systemic capabilities of the enterprise. According to RBV specialists, a firm's hard-to-replicate assets can offer a competitive advantage over its competitors (Barney, 1991; Lin & Wu, 2014). However, according to Akio (2005), it is not enough to have enough resources to be competitive; the organization must also be able to use these resources independently or in conjunction with organizational processes to achieve the strategic objectives of the company. The talent or skill of a company is part of the resources required for a strategic competitive advantage in this scenario. Therefore, business intelligence is not just an asset; it is a competitive resource.

### 2.2.2 Institutional Theory

Rowan and another scholar named Meyer were the original pioneers of the institutional theory which they conceived in the year 1977. The theory is founded on the notion that organizational policies together with organizational structures are not usually blended with the executive

operations (Meyer & Rowan, 1977). Internal and external characteristics that govern the success of a certain organization are considered in institutional theory. Besides that, some scholars including with Hussain and Hoque (2002) they posited that the manner in which performance indicators are made and even utilized are considerably impacted by the regulatory pressures specifically with reference to work experience.

The theory argues that there are three main frameworks that seriously affects the manner in which companies operates and how they gain credibility, they comprise of the economic frameworks, the social frameworks and the economic frameworks. Business processes that are subject to national pressures, business relationships and international commitments are greatly influenced by organizational transformation strategies. Keeping in mind that corporate activities can be destabilized when institutional concerns are birthed. With reference to companies operating in the financial service sector, it has been confirmed that institutional characteristics cannot be done without with as essential ingredients of performance evaluation (Hussain & Hoque, 2002). It has also been observed that coercive pressure together with regulatory factors (like for instance work experience) momentously dictates the manner in which the non-financial indicators are usually utilized (Munir et al., 2011).

The theory was used by the researcher to investigate how internal and external factors influence business practices, business behavior and organizational structure, as well as selected action measures. The theory was beneficial for assessing Saccos' organizational structure in respect to these principles. In the financial sector, especially at Saccos, this idea will be useful for evaluating institutional controls and business intelligence tools.

#### 2.3 Empirical Review

# 2.3.1 Organizational Strategy and Performance

Making decisions is a strategy (Porter, 1985). In line with Hambrick (1982), organizational strategy has been defined both methodically and descriptively. By exposing them to new combinations of conditions, organizations use strategies to influence changing environments (Miles and Snow, 1978; Mintzberg, 1978). Organizational factors must be taken into account for the business to function efficiently and properly. The BI system cannot add isolation. The link

between organizational strategy and therefore the use of business intelligence tools is fundamental and must be paid special attention to by senior management.

Mwangi (2016) delineates organizational structure as the process that allows enterprises to successfully pursue its plan. A comprehensive approach is not enough. Therefore, for successful implementation, it is necessary to have an assessment of the appropriate organizational structure, compensation system, organizational culture and leadership. Process planning, evaluation and analysis are all components of performance management. BI supports performance appraisal, notably measurement and analysis methodologies, by facilitating information access and enabling decision making across the performance management cycle. The effective implementation of business intelligence has an impact on the effectiveness of planning and analysis activities related to performance management (Alnoukari, 2017). An analytical framework for performance management and BI was proposed by Bogdana et al. (2009) to support strategic and operational measurement by integrating business objectives using dashboards and dashboards based on data collected by business intelligence tools. Therefore, the incorporation of business information such as dashboards and records is regulated in performance management (Alnoukari, 2017).

Research by Cherop (2016) focuses on strategy implementation and business performance in Kenyan manufacturing companies. The objective of this study was to investigate the link between strategy implementation and business performance in manufacturing companies in Kenya. To collect key data, CEOs and managers filled out standardized questionnaires. Along with results, strategy execution and a manufacturing company's performance are inseparable. Outcomes demonstrate that strategy execution has a superior impact on the economic success of Kenyan manufacturing businesses. Their study used a social survey research approach, which was time consuming, inefficient and led to sampling error. To counter this, this study will use a descriptive research approach.

The relationship between strategy implementation and organizational performance has been studied by Gikungi, Githui and Ndiao (2021). Because different parts of the company provide different services, a survey model and representative sampling approach are used to select an acceptable sample size. Outcomes divulge a strong link between the independent variables and performance. The company needs to adopt a leadership style that encourages creative and artistic

individuals, which is appropriate for the relationship. Another suggestion is that the corporate culture should be goal oriented to ensure that the goals are met. To protect the brand, the company must have strict procedures to maintain its administrative system. A survey method was applied in their investigation and a representative sampling approach, which was time consuming, inefficient and resulted in sampling error. The approach used in this study will be a descriptive study using the stratified sampling method.

Mutindi, Namusonge and Obwogi (2013) studied strategic management dynamics on the performance of the hotel sector. The researchers used a mixed qualitative and quantitative approach, including a descriptive survey. Overall, CRM system has a significant linear relationship with hotel performance, and there is a moderately significant linear relationship between strategic planning, strategic competitive positioning, and strategic positioning strategy and hotel performance, as well as a moderate relationship between information and communication technologies, learning, and hospitality success. In the study, the drivers of strategic management were identified as a set of tools that promote the success of a hotel. The hotel must understand the implementation of strategic management levers, in accordance with the relationship. The study focuses on the hotel industry, in particular the hotel industry. The main focus of this study was the Sacco domain and it examined the financial and non-financial performance indicators.

#### 2.3.2 Organisational Structure and Performance

The organizational structure, consistent with Khaleghi et al. (2013), is essential for organizational performance. According to Robbins (1991), the structure of the organization must be visible to all or all employees to avoid misinterpretations of the reporting process and therefore of the actual operating philosophy of the organization. The type of organizational structure gives an impression of the behavior of the individuals and groups that structure the organization. Small organizations can function effectively without an adequate board of directors, as long as everyone knows what they need to do and who they are dealing with (Bao, 2015). It goes without saying that having a decentralized structure improves organizational efficiency. BI systems seem to succeed and give the impression of an organization's performance in a decentralized structure where process-driven data, customers, and suppliers are transferred to higher-level agencies without being hindered.

Structural changes and organizational performance were studied by Oduory and Maende (2018) at Busia County Referral Hospital. Research shows that structural change has a significant effect on organizational performance at Busia County Referral Hospital. In line with the findings, the Busia County Referral Hospital should adopt a functional organizational structure in which each department is evaluated consistently with its function to maximize the talent and knowledge of patient employees, improving speed and clarity operational, and therefore organizational performance. Research focuses on overall organizational performance rather than the impact of structural changes on individual initiatives. Therefore, this study was mainly focused on structural changes within the company, particularly on how business intelligence structures have improved performance across all divisions.

Omondi (2015) examined the impact of organizational structure on comprehensive banking services. The researchers used a social inquiry technique to investigate. It is clear from the findings that more research is needed on how the organizational structure of Kenyan commercial banks affects performance, based on the findings. In addition, it is necessary to study the structure of economic banks and make recommendations on how to organize these banks to improve operational efficiency and provide them with a sustainable competitive advantage. Their study used a social survey research project that was time-consuming, inefficient, and led to sampling errors. To counter this, this study used a descriptive research approach.

Muriu (2019) studied the structure on the mobile commerce performance of Kenyan commercial banks (MCommerce). This study used a descriptive research approach with stratified sampling. A broad favorable relationship between structure and business success was divulged. As a result, research has revealed that organizational structure is critical to the performance of e-commerce. According to the study, commercial banks should change their organizational structure to facilitate strategy formulation. The study uses stratified sampling, which is limited as it cannot reflect all differences and therefore cannot provide the full picture. This survey used a random sampling approach, ensuring that each respondent had an equal chance of being selected.

#### 2.3.3 Business Process and Performance

Mbore, Sang, and Komen (2019) explored technical training institutes' internal control systems, organizational processes, and institutional performance. The investigation aimed to see if the technical training institutions' internal control system was working properly. The study included cross-sectional and explanatory research methodologies. The calculated coefficient from the research is 0.555, suggesting that organizational processes have a substantial effect on institutional performance. Further, the study demonstrates that the MCS governs the relationship between organizational processes and institutional performance, and that the MCS has a regulatory impact on the link between processes, organization, and institutional performance of Technical Training Institutes (TTI). The researchers employed a cross-sectional survey, which is prone to bias owing to poor response and incorrect due to memory bias.

Business Process Orientation in Croatia was explored by Glavan (2017). The orientation of business processes (BPO) and the performance of financial and non-financial institutions were the objectives of the study using real data from Croatian companies. The method used is a survey questionnaire. The findings suggest that BPO practice has a favorable relationship with non-monetary performance. The effect of non-monetary assets on financial performance was also confirmed. Non-financial factors are indirectly responsible for this effect on financial success, which implies that companies must also consider performance on these dimensions. Better understanding of BPO implementation and practice, along with clearly demonstrated financial and non-financial benefits; indicate a wider use of these systems in day-to-day operations, which can lead to improvements and further improvements. As the study was conducted in Croatia, it cannot be applied in Kenya. Instead, this study focused on the Kenyan Sacco industry as a whole.

# 2.3.4 Organizational Culture and Performance

Organizational culture considers the standards experienced by a company's employees and characterizes the work environment (Schneider et al., 2013). These standards influence the behavior and adaptability of employees to achieve company goals. Organizational culture refers to the way in which stakeholders such as employees and customers interact within a company (Simoneaux & Stroud, 2014). The business management philosophy described in the mission

statement is an example of a material culture in the workplace. Operational ideals define how businesses interact with their consumers and workers. This information is important, but the intangible component of culture is what really differentiates one company from another.

Muthoni (2013) studied how organizational culture influences strategy execution in commercial banks. The knowledge was collected via questionnaire during a census of Kenyan commercial banks. Research shows that to implement a technique in a company, standards and culture must be aligned with each other. A deviant organizational culture makes it difficult to implement planned plans. According to the study, commercial banks gain a competitive advantage. Only strategy execution includes a strong corporate culture. Their study used a census survey, which again may not have been approved within the Sacco Company. This study will apply the random sampling method to make it simpler.

Organizational culture and its impact on performance were studied by Oduol (2015). The tactic used was a transversal descriptive investigation. A strong culture occurs when employee and company values are aligned, but a weak culture exists when values and people do not align, consistent with research. Likewise, research finds that cultures focus on employee relationships, supervisor-employee relationships, and therefore the organization as a whole. Companies must establish a supportive organizational culture that provides strategies in employee activities, in line with research, to scale performance. The study uses a cross-sectional survey method, which is prone to bias due to insufficient resolution.

Poku and Owusu (2013) investigated the link between culture and banking success. In keeping with positivist research ethics, the study use a quantitative approach to collect, assess, and analyze data. According to the findings, emotional participation, regulatory involvement, and IT involvement are all positively connected to a bank's organizational culture in Ghana. The results help better understand how corporate culture has a big impact on employee engagement. The results show how important it is for multinational bank managers to focus on employee engagement to ensure that employees in the industry have a pleasant working environment. The research targeted one area, which was the banking Sacco industry.

# 2.4 Summary of Literature and Research Gap

**Table 2. 1: Summary of Literature Review** 

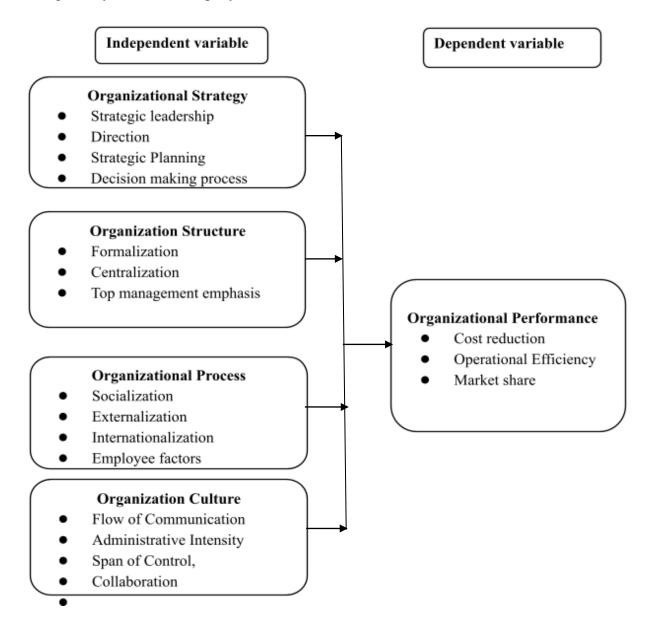
Author	Topic of the study	Study Variable	Gaps	Addressing the Gap
Gikungi, Githui and Ndiao (2021)	Link between Strategy Implementation and Organizational Performance: A Case Study of Telkom Kenya Limited, Kenya.	Organizational strategy	The study was focused on Telkom Kenya ltd.	This study decided to know how organizational strategy affected the organizational performance of Saccos in Nairobi County.
Mutindi, Namusonge and Obwogi (2013)	Effects of Strategic Management Drivers on the Performance of Hotel Industry in Kenyan Coast.	Organizational strategy	The study was conducted basing on the hospitality sector focusing on hotels.	This study focused on the Sacco sector and examined both financial and non-financial measures of performance.
Oduory and Maende (2018)	Structural Change and Organizational Performance in Busia County Referral Hospital, Kenya.	Organizational structure	The study looked at the performance of the organization as a whole as opposed to focusing on the influence of structural changes on individual projects.	This study looked into structural changes within the organization with a focus on how business intelligence facilities enhanced performances between this departments.
Muriu (2019)	The influence of organizational structure on Mobile-Commerce (MCommerce) performance in Kenya's commercial banks.	Organizational structure	The study adopted a stratified random sampling technique which is limited because it cannot reflect all differences complete representation is not possible.	This study adopted a random sampling technique which gives an equal chance of selection to all respondents.

Muthoni (2013)	The effect of organizational culture on strategy implementation in commercial banks.	Organizational culture	Their study adopted a census survey which is this case might not be possible to carry out a survey in the Sacco industry.	This study adopted a random stratified sampling to be more effective.
Oduol (2015)	Organizational culture and its influence on performance.	Organizational culture	The study adopted a cross sectional survey design which can be susceptible to bias due to low response and misclassification due to recall bias.	This study adopted a descriptive research design to counter this.
Poku and Owusu-Ansah (2013)	Organizational culture and organizational performance with a focus on the banking industry with the objective of determining the effect of organizational culture on performance of the banks	Organizational culture	The study focused on one sector which is the banks.	This study focused on the Sacco sector.
Mbore, Sang and Komen (2019)	Management control system, organizational processes and institutional performance of technical training institutions in Kenya.	Organizational process	The study adopted a cross sectional survey design which can be susceptible to bias due to low response and misclassification due to recall bias.	This study adopted a descriptive research design to fill this gap.
Glavan (2017)	The impact of business process orientation on organizational Performance: the case of Croatia.	Organizational process	The case study was done in Croatia with a focus on banks.	This research focused on a local context of the Kenyan Sacco sector.

Source: Researcher (2021)

# 2.5 Conceptual Framework

The conceptual framework in Figure 2.1 explains how the researcher computes the connections between the variables in the ongoing investigation. Among the variables studied are business intelligence systems and company success.



Source: Researcher (2021)

Figure 2. 1: Conceptual Framework

## 2.6 Summary and Research Gaps

This chapter focused on reviewing the literature for the study. It was more focused on focusing on the main goals of research in general. According to the literature review, Business Intelligence systems have been used in the past to improve organizational performance (Bach 2018; Bao, 2015; Gichobi, 2015; Elbashir 2008). At the same time, business intelligence has been shown to increase organizational profits (Bao, 2015). As a decision-making model, the BI system has also been shown to be able to help business leaders in their decision-making process through data storage and analysis.

There is a paucity of information on enquiries conducted in Kenya on the impact of BI on DT Sacco's organizational performance as most of the research was conducted in India. Despite the conceptual, contextual and methodological limitations, this study aimed to fill the knowledge gaps in the literature by analyzing the impact of business information on the operations of Saccos in the Nairobi County region.

### CHAPTER THREE RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter pinpointed and clearly discussed the research techniques and strategies that were used to address the research objectives. It clearly pointed out the research design that was appropriate for this study, the study population that was relevant to the objectives of the study and how a suitable sample size was going to be obtained from it and the proper sampling techniques that were used to sample the targeted respondents. This was succeeded by the discussion of the research instrument that was employed to obtain data and the techniques that were used to evaluate its quality with respect to how reliable or consistent it was and how valid it was. It further went ahead in outlining the procedures that were going to be undertaken in the data collection exercise. Finally, this chapter concluded by explaining the applicable data analysis tools that were used in making the obtained data to be meaningful and in precisely addressing the conceived objectives of this study.

## 3.2 Research Design

A research design is an overview plan of strategy of the steps that will be followed to precisely answer the research questions or address certain research objectives (Kombo & Tromp, 2006). The particular research design that will fit this research inquiry will be the descriptive research design. This is because it is suitable in using a survey tool to collect data or information from a sample of respondents in a speedily manner and encourage the use of data analysis tools to transform the data into understandable information, described in a manner that will precisely address the study objectives (Onjure, 2018). It's also an exceptional research design for obtaining data from a variety of study elements with varying aspects like for instance people possessing different educational backgrounds (Kothari, 2004). The descriptive research design was used to obtain, analyze and describe data on Business Intelligence and the Sacco performance in Nairobi County, Kenya. It was also used to establish and describe the linkage between Business Intelligence and the Sacco performance in Nairobi County, Kenya.

## 3.3 Target Population

The unit of analysis that served the objectives of this particular study was the DT Saccos situated in Nairobi County, Kenya. In addition, the unit of observation of this research inquiry was solely the staff members working in different departments of the DT Saccos. A total of 38 deposit-taking Saccos located in Nairobi County was the target population of this research inquiry. The list of all the 38 deposit-taking Saccos was presented in Appendix III. The study population that this research inquiry focused on was clearly portrayed in Table 3.1. All the DT Saccos are categorized into either big DT Saccos, small DT Saccos or medium DT Saccos (SASRA, 2019). The size is measured in terms of total monetary deposits and assets (SASRA, 2019). The total number of big DT Saccos that this study focused was 13, on the other hand, the total number of medium DT Saccos that this study targeted was 20. Finally, the aggregate number of small DT Saccos that this study focused on was 5. The total target population in line with each DT Sacco category was prescribed in Table 3.1 below.

**Table 3. 1: Distribution of Target Population** 

Category	Total population	Percentage
Large	13	34
Medium	20	53
Small	5	13
	38	100

Source: SASRA Sacco Supervision Annual Report (2020)

## 3.4 Sampling Design and Procedure

For each DT Sacco either large, medium or small, five departmental units possessing clear and current knowledge about Business Intelligence were chosen. Thus, proportionate representative sampling was used for each stratum, be it the large, medium or small DT Sacco, only five departmental units were studied. One staff member represented a particular departmental unit. Consequently, a total of 65 staff members represented the 13 large Saccos. Additionally, a total of 100 staff members represented 20 medium Saccos. While, a total of 25 staff members

represented the 5 small Saccos. Drawing for this, the sample size of this study that denoted all the 38 DT Saccos was 190 staff members. Table 3.2 portrayed how the sample size was reached upon.

**Table 3. 2: Distribution of Sample Size** 

Category	Total population	Percentage	Functional Areas	Sample Frequency
Large Saccos	13	34	5	65
Medium Saccos	20	52	5	100
Small Saccos	5	13	5	25
	38	100		190

Source: Researcher (2021)

#### 3.5 Research Instruments

Semi-structured questionnaires containing both closed and open ended questions will be used by the research inquiry to solicit for the relevant responses from the respondents that will be used as both quantitative and qualitative data for analysis. The questionnaire is attached in Appendix II. The questionnaires will be taken physically to the staff members in their respective offices for them to answer the question items that will be used for analysis. Semi-structured questionnaires are very effectual in retrieving the appropriate data since they are not only pre-formulated for easier quantitative analysis but also are able to retrieve qualitative information that can be used to back-up the quantitative data (Malhotra, 2004). The questionnaire will have five separate sections. The initial section, named Section A will pursue the personal information of the respondents while Section B pursues to obtain information that will describe the organizational strategy of DT Sacco in Nairobi County, Kenya. Section D pursues to get information that will describe the business process of DT Sacco in Nairobi County, Kenya.

Section E pursues to get information that will describe the organizational culture of DT Sacco in Nairobi County, Kenya. Finally, Section F pursues to get information that will describe the organizational performance of DT Sacco in Nairobi County, Kenya. Sections B to F with closed questions on a numerical scale known as the Likert scale, which will have 5 levels of agreement.

## 3.6 Validity and Reliability of Research Instrument

# 3.6.1 Pilot Study

To assess the stability together with the validity of the survey tool, a mock/pilot study will be executed by the researcher. This will be done by involving 19 staff members from DT Saccos whose responses will be used for the quality assessment of the questionnaire. The findings will pinpoint areas that needs to be corrected, modified or cleaned for the survey instrument to be adequately reliable and valid.

# **3.6.2** Validity of Research Instruments

Validity is simply understood as the extent to which an instrument can go in measuring what it is designed to or expected to measure (Jankowicz, 2005). It illustrates the degree of accuracy on the study outcomes and its essential role in conceiving conclusions (Bryman & Cramer, 2005). The content validity of the instrument was assessed by a pilot test. The tool was constructed based on the insight of the reviewed studies in the literature review. The content validity was ensured through double checking the questionnaire to establish if it had covered all the essential aspects of the study as per the literature review. The questionnaire was reviewed by at least 5 staff members from the DT Sacco who were very conversant with the business intelligence aspects and organizational performance of the Saccos. The constructive suggestions that the reviews came up with to boost the content validity of the questionnaire were incorporated to improve and develop the final research instrument. This is considering the fact that before the validity test process, the variables that were focused on by this research inquiry precisely mirrored the theoretical propositions illustrated in the conceptual framework.

## 3.6.3 Reliability of Research Instruments

Reliability in the context of social research is the level of consistency in the production of same results when the research instrument is recurrently used at different points of time in the same context (Heale, 2015). The model that is commonly used in social research to test for the level of internal consistency of the research instrument is the Cronbach's Alpha can be found in the SPSS software (Sekaran, 2003). The Cronbach's Alpha denotes numerical values starts from 0 to 1 that attempts to illustrate the positive linkage between the question items assessing a certain variable of interest (Sekaran, 2003). Results giving a value of 0.7 to 1 means that there is a strong linkage between the question items symbolizing strong internal consistency of the questionnaire, thus, meaning that it is very reliable and will give similar outcomes even when it is used in different periods of time (Ehlers, 2000). Though Cooper and Schindler (2003) was certain that a Cronbach's Alpha figure of 0.5 or more can be confidently interpreted as good in terms of testing the stability or internal consistency of the survey tool. Muathe (2010) together with Kiiru (2015) used this rule of thumb to test the stability of their survey instruments.

The reliability test results based on the analysis of the data that was obtained from the pilot test was presented in Table 3.3 below.

Table 3. 3: Reliability Test Results

Variable	Cronbach's Alpha	No. of Items
Organizational Strategy	0.966	11
Organizational Structure	0.894	11
Business Process	0.976	7
Organizational Culture	0.913	10
Organizational Performance	0.970	5

Source: Researcher (2022)

Organizational Strategy, as it can been seen in Table 3.3, posted a Cronbach's Alpha value of 0.966. Aside from that, Organizational Structure, Business Process, Organizational Culture and Organizational performance displayed Cronbach's Alpha values of 0.894, 0.976, 0.913 and 0.970 respectively. This meant that all the Cronbach's Alpha values of all the study variables were greater than 0.7. This meant that the questionnaire in general was very reliable and would give similar outcomes even when it is used in different periods of time (Ehlers, 2000).

#### 3.7 Data Collection Procedure

The mode of collecting data from the respondents was through self-administration involving going to the offices of the respective respondents and giving them questionnaires to be responded to. One needs to apply for the research permit as a requirement before collecting data from the research regulatory body in Kenya known as the National Commission for Science, Technology and Innovation (NACOSTI). The research permit did not only illustrate the credibility of the research to the respondents but helped in authorizing the DT Saccos to assist the researcher with the information needed through questionnaires to obtain data. An introduction letter, written by Kenyatta University on behalf of the researcher was also used to convince the DT Saccos to provide assistance in giving the researcher the data needed to address his research purpose through the questionnaires that were given to them. The questionnaires were given to the respondents to be filled and retrieved after a maximum of two days as agreed with the respondents. Those who were not able to respond to every question item in the survey tool after the deadline had transpired, were given an additional day to duly fill the questionnaires.

## 3.8 Data Analysis and Presentation

When the researcher finalized the data collection process, the responses inscribed in the questionnaire were keyed in MS Excel as numbers for easy data analysis process. Incomplete questionnaires were not used during the data entry process. Moreover, wrong responses were not put in the MS Excel worksheet. The data was organized as follows for easier data analysis, the first part included numerical data touching all the demographic aspects. The second part included numerical data linked to the independent variables and finally, the third part included numerical data linked to the dependent variable. The IBM SPSS Statistic 22 software was used by the researcher for data analysis since it is accessible involving a free 2 week trial version with all the relevant data analysis tools in it. Descriptive tools limited to frequencies and percentages were used to elucidate the demographic aspects of the respondents. On the other hand, descriptive tools were only be restricted to mean scores and standard deviation that helped the researcher in describing the organizational strategy, organizational structure, organizational process,

organizational culture and organizational performance of savings and credit cooperative societies in Nairobi County, Kenya. Multiple linear regression tool that is also in the SPSS software was used by the researcher to investigate if indeed the four aforementioned business intelligence factors impacts the organizational performance of SACCOs in Nairobi County, Kenya. The researcher conceived the following applicable regression equation;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Whereby,

**Y** = Organizational performance the dependent variable

 $X_1 = Organizational strategy the independent variable,$ 

X<sub>2</sub>= Organizational structure the independent variable,

 $X_3$  = Organization process the independent variable,

 $X_4$  = Organizational culture the independent variable,

e = Margin error,

 $\alpha$  = represents the constant

 $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  and  $\beta_4$  are regression coefficients

### 3.9 Ethical Considerations

Researchers are supposed to adhered to the ethical principles of professional research and generally conduct themselves in a rightful way throughout the whole process of developing research. One of the primary research ethical principles that the researcher adhered to was ensuring that the development of this proposal was done with integrity and honesty. This was achieved by ensuring that the report did not possess any aspect of plagiarism. All published materials, manuscripts, unpublished reports that were in softcopy or printed were properly referenced and duly cited in every relevant part of this proposal. The Turnitin anti-plagiarism software was used to ensure that the report had a considerably low similarity index and sections that portrayed cases of plagiarism were properly paraphrased. Keeping in mind that plagiarism might attract legal consequences if the original writer's trademark, copyright or patent is infringed. Another research ethical principle that will be adhered to is informed consent. Initially, the research applied and obtained a research permit from NACOSTI detailing the purpose of the study, what the study sought to do and the role of the researched elements. The research permit sought to enlighten the respondents that they were going to be studied and the particular attributes that the study was interested in investigating.

During the data collection exercise no one was forced to partake in the study. Moreover, the researched elements were free to stop participating in the study for any reason. No one was forced to participate in the study against their will. Another important research ethical principle that the researcher adhered to is the principle of confidentiality, even though the researcher was aware of the identities of the research subjects, the research did not any way reveal their identities in this research. Since, the researcher ensured that the respondents did not indicate their names or of their organizations in the questionnaires. Additionally, the responses recorded were summarized to statistical analysis, interpretation and discussion without in anyway showing how each particular organization participated in the study. Honesty was ensured by truly collecting data from the field, analyzing the data and presenting the findings as they were without faking or cooking data to achieve a particular outcome. In general, every research subject and all the other stakeholders of this study were accorded with the respect and dignity they deserved.

### **CHAPTER FOUR**

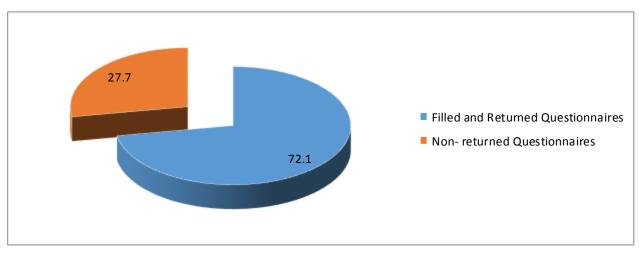
## RESEARCH FINDINGS AND DISCUSSIONS

### 4.1 Introduction

The chapter opens by reporting the response rate the study was able to achieve, it then went ahead to report the descriptive and the regression findings in line with each specific objective.

# **4.2** Analysis of the Response Rate

The study, after a successful data collection exercise, was able to obtain 137 filled questionnaires out of the 190 that had been originally distributed. The study was able to achieve a successful return rate of 72.1% which was more than enough to address the phenomena of interest according to the criteria established by Smith et al. (2019). Since according to the criteria, the response rate achieved from personal administered surveys ranging between 21% to 70% is enough for analysis and reporting writing. The analysis of response rate is presented in Figure 4.1 in the next page.



Source: Survey Data (2021) Figure 4. 1: Response Rate

## 4.3 Respondents' Biographical Information

The results that has been displayed in Table 4.1 shows the demographic outcomes of the employees working in Saccos studied.

Table 4. 1: Analysis of Background Information

Category	Sub-Category	Frequency	Percent
Gender/Sex	Are you a male?	85	61.15
	Are you a female?	54	38.85
	Total	139	100
Years accumulated	I have worked for less than 5 years	27	19.42
since beginning the	I have worked in my profession for only 5	36	25.90
work profession	to 10 years		
	I have worked in my profession for 10 to	47	33.82
	15 years		
	I have worked in this profession for at least	29	20.86
	15 years		
	Total	139	100
Position	Finance Manager	19	13.65
	Human Resource Manager	27	19.31
	Marketing Manager	27	19.31
	ICT Manager	30	21.59
	Operations Manager	36	26.14
	Total	139	100

Source: Survey Data (2021)

Table 4.1 shows that the responses were not evenly balanced across genders. With 61.15 % men and 38.85 % females responding, there were rather more male responses than female responses. This reflects the fact that males outnumber women in the workforce, as well as a fair balance in which neither gender has held all posts. A huge number of the respondents were those who had served between 10 and 15 years, who accounted for 33.82% of the total. Only 19.42% served for less than 5 years. The remaining participants, 25.90% and 20.86%, have worked in this profession for only 5 to 10 years and for at least 15 years, respectively. This is in conformity with financial sector staff development standards, which emphasize expertise and years of service. This indicates that the participants in the study are capable of providing accurate data on the research variables.

Additionally, Operations managers make up the vast majority of respondents (26.14%), whereas Finance managers made up the smallest group (13.65%). ICT managers accounted for 21.59%, while Human resource and marketing managers accounted for 19.31% of the remaining respondents. Thus, the findings obtained was balanced since it was almost equally based on the opinions of the respondents across all the job positions.

## 4.4 Descriptive Analysis

In this section the descriptive statistics for the study variables that includes the four business intelligence factors and organizational performance are reported. The researcher used the mean together with the standard deviation statistical tools to condense the raw data and to meaningfully describe the current level of effectiveness of the four business intelligence factors and the present level of performance of the DT-Saccos. The numerical data was obtained from question statements coded as numbers which was enabled by a Likert measurement scale constituting of 5 levels of agreement. The value of 1 denoted the first but lowest level of agreement described as "Strongly Disagree" and the value of 2 denoted the second order of agreement described as "Disagree". Besides that, the value of 3 denoted the third order of agreement representing the numerical code of "Moderate", while the value of 4 denoted the 4<sup>th</sup> order of agreement described as "Agree". Finally, the fifth order of agreement described as "Strongly Agree" was coded as 5.

## 4.4.1 Organizational Strategy

The descriptive results that showed the perceived effective level of organizational strategy among the Saccos in Nairobi County are presented in Table 4.2 in the next page. The results were anchored on the four indicators of organizational strategy, namely, strategic leadership, strategic direction, strategic planning and decision-making process.

Table 4. 2: Descriptive Statistics for Organizational Strategy

Organizational strategy	Mean	Standard
		Deviation
Top executives are officially in charge of the Sacco's	4.37	0.71
strategic business strategy.		
The leadership in the Sacco has concrete vision for the future	3.87	1.03
of the organization		
Having a written mission statement improves organizational performance	3.65	0.70
Strategic planning increases Sacco performance when	3.13	0.89
resources (managers' time, money, staff assistance, etc.) are set aside expressly for it.		
Strategic planning is a high-priority task that must be	3.69	1.07
completed on a regular basis.		
The Sacco follows a defined set of procedures in its strategic	3.87	1.03
planning process		
Sacco performance is improved by following a specified set	3.69	0.80
of processes during the strategic planning process.		
The Sacco systematically measures actual performance versus goals set	3.67	0.79
Systematically measuring actual performance vs. goals set	3.99	0.74
improves organizational performance.		
The Sacco actively develops new products and services	3.69	1.08
The Sacco is constantly seeking new market opportunities for	3.80	0.85
growth		
The organization strategy is clearly articulated by the	3.88	0.75
management		
Aggregate score for Organizational strategy	3.80	0.87

Source: Survey Data (2021)

The overall mean organizational strategy score is 3.80, as shown in Table 4.2. On the 5-point Likert scale used in the study, this mean score is about equal to 4.00 (agree). There was also little variance in responses from the mean response, as illustrated by the aggregate standard deviation of 0.87. The total mean score suggests that respondents agree that organizational strategy-related activities are carried out by DT-Saccos in Nairobi County. However, there was some skepticism regarding strategic planning improving DT-Sacco performance when resources were set aside specifically for that, as demonstrated by a mean of 3.13, near to 3.00 (moderate), and a standard deviation of 0.89. Most of the respondents from the DT-Saccos in Nairobi County strongly agreed (justified by a mean of 4.37 which is greater than 4) that the top executives are officially in charge of the Sacco's strategic business strategy. Besides that, the data was fairly

close to the mean as shown by the standard deviation figure of 0.71. It can also be observed that the majority of the respondents in DT-Saccos at Nairobi County agreed that the leadership in the Saccos have a concrete vision for their future and that the Sacco follows a defined set of procedures in their strategic planning process. The statements were justified by a mean of 3.87 which was close to 4 that indicated agreed. This is considering that the data of the two aforementioned statements were fairly close to the mean as shown by the standard deviation figure of 1.03.

A clear strong vision operationalized by a defined set of procedures in an organizational strategy boosts productivity and more importantly efficiency (Ahmed, 2019). The findings also concurred that the DT-Saccos in Nairobi County have organizational strategies that are clearly articulated by the management and that the Saccos constantly seeks new market opportunities for growth. This was supported by mean values of 3.88 and 3.80 respectively. The data for the two aforementioned statements were close to the mean justified by standard deviation values of 0.75 and 0.85 respectively which were fairly low. The findings of the study agreed with Fakii (2013) who observed that a clearly articulated strategy proves easy to be implemented thus increasing organizational efficacy and optimal usage of resources with minimum wastage. The research results was also able to confirm that strategy planning is a high-priority task that should always be finished on a consistent basis and the Sacco performance is actually improved by adhering to a definite set of processes during the strategic planning process. This was supported by a mean value of 3.69. The data for the two aforementioned statements were close to the mean justified by standard deviation values of 1.07 and 0.80 respectively which were fairly low. The findings of the study agreed with Taiwo and Idunnu (2007) who noted that prioritizing on the execution of strategy planning with clearly defined processes boosts organizational performance.

The findings of the study was also able to observe that most of the respondents agreed (since the mean of 3.67 was close to 4 = agreed) that the DT-Saccos in Nairobi County systematically measures actual performance against the goals set. All the responses for the statement were close to the mean since the standard deviation value was 0.79 which was relatively low. The research results also reported that having a written mission statement improves organizational performance. This was supported by a mean value of 3.65. All the responses for the statement were close to the mean since the standard deviation value was 0.70 which was relatively low. The findings of the study were congruent with the outcomes of Sattari, Pitt and Caruana (2011)

who observed that a clear and simple mission statement that can be easily understood and can be realistically operationalized will lead to a firm to achieve its projected outcomes. Though the findings conflicted with the findings of Alawneh (2015) who observed that mission statements that have been clearly written, short and are simple does not any serious impact on performance in the context of the Jordanian banking sector.

# 4.4.2 Organizational Structure

The descriptive results that showed the perceived effective level of organizational structure among the Saccos in Nairobi County are presented in Table 4.3 below. The results were anchored on three indicators namely, formalization, centralization and focus on top management.

**Table 4. 3: Descriptive Statistics for Organizational Structure** 

Organizational Structure	Mean	Standard Deviation
The Sacco has good structures that enable and facilitate flow of	4.68	0.64
information to its employees.		
The Sacco structure facilitates the speed of decision making within	4.30	0.95
the organization.		
The organization structure adopted fosters creation of lean teams	2.84	1.50
within the Sacco.		
The organization structure adopted fosters efficient tasks'	3.19	0.81
completion within the Sacco.		
The organization structure adopted by the Sacco facilitates optimal	4.54	0.63
span of control for the all the people leaders.		
The organization structure facilitates excellence of the leadership	3.90	0.44
team in implementing strategic objectives within the organization.		
The organization structure at the Sacco fosters effective execution	3.61	0.67
of global strategic decisions.		
Decision-making that is centralized rather than decentralized is	3.65	0.70
more cost-effective.		
The Sacco's decision-making and plan implementation are slowed	3.86	1.03
by a centralized structure.		
The most effective approach to improve Sacco performance is to	3.65	0.70
have numerous hierarchical layers.		
Having fewer hierarchical levels is the most efficient way of	3.37	0.71
improving firm's performance.		
Aggregate scores for organizational structure	3.78	0.79

Source: Survey Data (2021)

The overall mean score for organizational structure was 3.78 as presented in Table 4.3. This meant that the majority of respondents agreed that their companies had effective organizational structure mechanisms in place. This meant that organizational structure is crucial for fostering organizational excellence. The low aggregate standard deviation of 0.79 suggested that most of the responses for all the 11 statements were grouped around the mean. This is considerably that the standard deviations for the 11 statements ranged between 0.44 and 1.50. The aggregate mean results of the organizational structure supports Njiru (2014) claim that organizational structure influences the performance of commercial state corporations, intimating that when a corporation's management develops its organizational structure to meet its performance targets, organizational size, structure formalization, structure complexity, and structure centralization should be properly considered. The evidence, on the other hand, contradicts the findings of Omondi et al. (2017), who found that strategic knowledge competency defined by organizational structure had no significant influence on commercial bank performance in Kenya.

Most of the respondents studied in the DT-Sacco industry in Nairobi County noted that their Saccos have good structures that enables and facilitates flow of information to its employees. This was supported by a mean of 4.68. Besides that, the findings provided evidence that organization structure adopted by the Sacco encourages optimum span of control for the top leadership. This was actually supported by a mean of 4.54. The findings concurred with Onono (2018) who observed that the optimum span of control of the top leadership working at the General Electric Africa ltd can be only realized when an effective organizational structure is adopted. The findings also suggested that the organizational structures of the Saccos facilitates the speed of decision making. Supported by a mean of 4.30. The findings were consistent with the outcomes of Andersson and Zbirenko (2014) which observed that proper organizational structure assists in speedy decision in the context of the public health care organizations. The descriptive results also provided evidence that the organization structure accelerates team-leadership excellence when implementing strategic objectives within the organization. This was supported by a mean of 3.90. Most of the respondents agreed that decision-making and plan implementation are slowed by a centralized structure. This was supported by a mean of 3.86.

Though it was also established that a centralized decision-making system is more cost-effective than when compared to a decentralized decision-making system. This was justified by a mean of 3.65. Aside from that, the descriptive results pointed out that the organization structures of

Saccos fosters effective execution of global strategic decisions. Supported by a mean of 3.61. It is interesting to note that most of the respondents either disagreed or indicated that they moderately agreed that the organization structures adopted by Saccos fosters the creation of lean teams. This was justified by a mean of 2.84.

### **4.4.3 Business Process**

The descriptive results that showed the perceived effective level of business process among the Saccos in Nairobi County are presented in Table 4.4 below. The business process variable was assessed using indicators such as socialization, externalization, internationalization, and employee aspects.

**Table 4. 4: Descriptive Statistics for Business Process** 

<b>Business Process</b>	Mean	Standard Deviation
The Sacco collects and analyzes market and other external factors that	4.27	0.63
impact the business on a regular basis.		
Sacco performance is improved by obtaining and evaluating data about	3.20	0.85
the market and other external elements that impact the business on a regular basis.		
Environmental factors (political, social, economic, environment and	3.25	0.92
legal) affect organizational performance		
Political factors (political climate, tax policies, trade restrictions,	3.84	0.48
tariffs, and political stability) affect the performance of the this organization		
Economic factors (economic growth, interest rates, exchange rate and	3.01	0.45
inflation rates) affect the performance of the this organization		
Technological factors (ecological and environmental aspects,	3.27	0.51
incentive rates on technology, rate of technological change and		
development) affect the performance of the this organization		
Legal factors (consumer laws, antitrust laws, Finance bills, and health	3.86	1.03
and safety laws) affect the performance of this organization.		
Aggregate scores for business process	3.53	0.70

**Source: Survey Data (2021)** 

As indicated in Table 4.4, the average score for business process items is 3.53, with a standard deviation of 0.70. This overall mean score trends to 4.00 (agreement) on the 5-point Likert scale used in the survey, signifying that respondents largely acknowledged that business process

activities are done in DT-Saccos in Nairobi county and are effective in improving firm performance. Furthermore, the responses were clustered around the mean value, as seen by the low aggregate standard deviation 0.70. It also indicates that majority of the responses for all the question items used to measure business process were close to the mean since their standard deviation values ranged between 0.45 and 1.03 which were comparatively low. The findings noted that Saccos in Nairobi County collects and analyzes market and other external factors that impact the business on a regular basis. This was supported by a mean of 4.27. Most of the respondents that were studied at the DT-Saccos in Nairobi County observed that legal factors (consumer laws, antitrust laws, Finance bills, and health and safety laws) and political factors (political climate, tax policies, trade restrictions, tariffs, and political stability) affect the performance of the Saccos. This was justified by mean scores of 3.86 and 3.84 respectively. Interestingly, most of the respondents moderately agreed that Sacco performance is improved by obtaining and evaluating data about the market and other external elements that impact the business on a regular basis. This was justified by a mean of 3.20 that is close to 3 (Moderately Agree). They also moderately agreed that economic factors (economic growth, interest rates, exchange rate and inflation rates) affects the performance of the Saccos. Justified by a mean of 3.01.

## **4.4.4 Organizational Culture**

The descriptive results that showed the perceived effective level of organizational culture among the Saccos in Nairobi County are presented in Table 4.5 in the next page. The variable on organizational culture was measured using various indicators including; flow of communication, administrative intensity, span of control, and collaboration.

**Table 4. 5: Descriptive Statistics for the Organizational Culture** 

Organizational Culture	Mean	Standard
		Deviation
The Sacco has established goals for which it aspires, goals that are applicable to all divisions of the organization.	4.49	1.36
Organizational culture management is a crucial component of organizational performance.	4.72	1.28
Organization culture enhances organizational performance in the organization	3.69	1.39
The values of consistency, flexibility, and an effective communication system govern this Sacco.	3.75	1.33
The way things are done at this company is determined by its culture.	3.47	1.44
The Sacco has a set of values that define who its workers, customers, and suppliers are, as well as how they interact with one another.	3.91	1.38
Employees at the Sacco have a strong feeling of belonging, which motivates them to work more.	3.75	1.33
The Sacco is able to read the business environment and react quickly to current trends	3.69	1.37
The Sacco ensures that activities and efforts are coordinated throughout the organization's various divisions so that "the right hand knows what the left hand is doing."	3.88	0.75
This Sacco adapts effectively to changes in the business environment, including rivals.	3.99	0.74
Aggregate scores for Organizational Culture	3.56	1.24

Source: Survey Data (2021)

The total mean score and standard deviation for organizational culture items were 3.56 and 1.24, respectively, according to Table 4.5. The aggregate mean score on the 5-point Likert scale used in this study is close to 4.00 (agree), signifying that respondents feel that the effective organizational culture indicators were present in the DT-Saccos in Nairobi County. Aside from that the responses were clustered around the mean value, as seen by the low aggregate standard deviation 1.24. It also indicates that majority of the responses for all the question items used to measure organizational culture were close to the mean since their standard deviation values ranged between 0.74 and 1.44 which were comparatively low. With a mean score of 4.49, respondents tended to firmly agree that the Sacco has established goals towards which it strives, goals that apply to all divisions of the organization. Similarly, respondents strongly agreed that organizational culture management is a vital component of organizational performance, with a mean of 4.72. According to the respondents, externally oriented cultures are greater predictors of success, however they are supported by the firm's internal integration through hierarchical culture. As a consequence of the findings, the study concludes that organizational culture is critical in obtaining superior performance outcomes in Nairobi County's DT-Saccos.

These findings supported Owino and Kibera (2019) claim that organizational culture is a critical source of long-term competitive advantage in the microfinance industry, implying that market culture fosters long-term financial independence and sustainability. The findings further supported Maina (2016) conclusions that there was a positive substantial correlation between organizational culture and organizational performance in Kenyan banks, and that organizational culture should be reinforced. With a mean of 3.99 and 3.91 respectively, the respondents concurred that the Saccos in Nairobi County, Kenya adapts effectively to changes in the business environment, including against their rivals and that the Saccos have a set of values that define who its workers, customers and suppliers are, as well as how they interact with one another. According to Reeves and Dienler (2011) in order to adapt effectively and attain a competitive edge over its business rivals, a firm must be tuned to the signs of change in the external environment, recognize them and exploit them fully to their advantage in order to stay ahead in the market. Besides that, with a mean of 3.88 the respondents agreed that the Saccos ensures that activities and efforts are coordinated throughout the organizations' various divisions so that "the right hand knows what the left hand is doing."

It was also noted that the respondents concurred with the fact that the values of consistency, flexibility, and an effective communication system governs their Saccos justified by a mean of 3.75. The findings concurred with Shannon (2018) who observed from the interview feedbacks that American organizations promotes the culture of effective communication since it is a great catalyst of work commitment and enhanced productivity. The study also noted that the respondents were able to concur that they have a strong feeling of belonging, which motivates them to work more in the Saccos justified be a mean of 3.75. The respondents also agreed that their Saccos are able to read the business environment and react quickly to current trends and that organization culture enhances organizational performance in the organization. This was supported by the mean value of 3.69.

# **4.4.5 Organizational Performance**

The descriptive results that showed the perceived level of organizational performance among the Saccos in Nairobi County are presented in Table 4.6 in the next page. The variable on the organizational performance was measured using indicators comprising of cost reduction, operational efficiency, and market share.

**Table 4. 6: Descriptive Statistics for Organizational Performance** 

Organizational Performance	Mean	Standard
		Deviation
The market share of my Sacco has been gradually expanding.	4.26	0.61
In every financial year the Sacco's return on investment has been improving.	4.15	0.48
The overall profitability of the Sacco together with its liquidity ratios has been gradually improving in every financial year.	4.38	0.70
The efficiency in terms of minimization of wastage and effectiveness in the Sacco's business activities has been improving.	4.58	0.72
The tasks of the Saccos have been greatly automated.	4.14	0.63
Aggregate scores for organizational performance	4.30	0.63

Source: Survey Data (2021)

The overall mean of 4.30 meant that the level of organizational performance of Saccos was relatively high. Because the aggregate standard deviation is low meaning that the variability of answers is limited. The fact that the variance of replies from the aggregate mean response is so small underscores the importance of organizational effectiveness in DT- Sacco performance. The respondents strongly agreed (since the mean of 4.58 is much close to 5 "Strongly Agree") that the efficiency in terms of minimization of wastage and effectiveness in the Sacco's business activities has always been improving. Aside from that, the mean value of 4.38 indicated that the overall profitability of the Sacco together with its liquidity ratios has been gradually improving in every financial year. Additionally, there was a general consensus among the respondents that the Saccos have experienced increased market share over the previous years. Justified by a mean of 4.26. The majority of the respondents also concurred that their Saccos' return on investment (ROI) has increased as compared to previous years. Supported by a mean of 4.15. This is in conjunction with the fact that organizational tasks among the Saccos have become more automated and efficient leveraging on organizational performance. This was justified by a mean of 4.14.

## 4.5 Regression Analysis

In this study, multiple linear regression analysis was utilized to examine the relationship between BI systems and performance across micro-finance institutions in Nairobi County, Kenya. This was accomplished using field data, and the results were interpreted by using the R-Square,

ANOVA and the regression coefficient results. Table 4.7 representing the model summary results with the R-Square denoting the level of change on organization performance accounted by all the 4 BI factors is presented below.

**Table 4. 7: Model Summary Findings** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.766a	.587	.579	.27009

<sup>.</sup> Predictors: (Constant), Organizational strategy, organizational structure, business process and organizational culture.

## **Source: Survey Data (2021)**

Using a multiple regression model, Table 4.7 shows how BI systems affect DT-Sacco performance. The R-squared value adjusted is 0.579, whereas the R-squared value is 0.587. This suggests that, in DT-Saccos, the organizational strategy, organizational structure, business process, and organizational culture account for 58.7% of the variation in company performance. As seen by the modified R squared, the model is a strong match for assessing the influence each independent variable has on firm performance in DT-Saccos (0.579). The quality of fit of the model was further confirmed by the standard error of estimate value of 0.27009. The statistic was comparatively low, showing that the data was extremely near to the regression line, indicating that the model fit perfectly.

Table 4.8 below denoting the ANOVA results shows how significant the BI factors accounted for the change in the performance of Saccos in Nairobi County.

Table 4. 8: Summary of ANOVA Results of the Regression Analysis

	Model	Sum of	df	Mean	$\mathbf{F}$	Sig.
		Squares		Square		
	Regression	15.774	3.00	5.258	72.081	.000 <sup>b</sup>
1	Residual	11.088	152.00	.073		
	Total	26.862	155.00			

<sup>&</sup>lt;sup>a</sup>. Dependent Variable: Firms performance

Source: Survey Data (2021)

<sup>&</sup>lt;sup>b</sup>. Predictors: (Constant): Organizational strategy, organizational structure, business process and organizational culture.

The regression model that predicts the association between the dependent and independent variables is significant at F=72.081 and p-value = 0.000, according to the research findings in Table 4.8. The p-value of 0.000 which is less than 0.05, indicated that all the four business intelligence factors (organizational strategy, organizational structure, business process and organizational culture) significantly accounted for the 58.7% change in the performance of the Saccos in Nairobi County.

Table 4.9 that was presented in the next page depicts the regression coefficient results with reference to how each business intelligence factor affected the performance of Saccos in Nairobi County.

**Table 4. 9: Coefficients of Regression Equation** 

Model	Unstandar Coefficie		Standardized Coefficients	t	Sig.
	β	Std.	Beta		
	-	Error			
(Constant)	1.193	.432		1.127	.115
Organizational Strategy,	.209	.108	.192	5.109	.000
Organizational Structure,	.175	.125	.128	2.316	.019
<b>Business Process</b>	.548	.143	.340	14.488	.000
Organizational Culture	.257	.124	.207	5.920	.000

<sup>&</sup>lt;sup>a</sup>. Dependent Variable: Organizational performance

Source: Survey Data (2021)

The following was the study's established model based on the results presented in Table 4.9 in the previous page;

 $Y=1.193+0.209\ Organizational\ Strategy+0.175\ Organizational\ Structure+0.548\ Business$   $Process+0.257\ Organizational\ Culture+\epsilon$ 

When all the business intelligence components (organizational structure, strategy, process, and culture) are maintained constant at zero, organizational performance will 1.193, as shown in Figure Table 4.9. This means that the level of organizational performance of the Saccos in Nairobi County will be very low in the absence of organizational strategy, organizational structure, business process and organizational culture.

# 4.5.1 Impact of Organizational Strategy on the Performance of Saccos in Nairobi County, Kenya

The first objective was to determine if organizational strategy impacts the performance of Saccos in Nairobi County, Kenya. The unstandardized beta coefficient of organizational strategy presented in Table 4.9 was used by the researcher to address the objective. Organizational strategy posted an unstandardized beta coefficient of 0.209, this meant that when organizational strategy is increased by only one unit, then the performance of Saccos in Nairobi County will momentously increase by 20.9% (considering that its *p*-value of 0.000 is lower than 0.05). Thus, organizational strategy considerably impacts the performance of Saccos in Nairobi County, Kenya in a positive manner. The findings meant that the top leadership being in control of the Saccos' business strategies concentrating on the vision for the future of the Saccos and the Saccos adhering to a well-defined set of procedures in their strategic planning process will boost their organizational performance in terms of increased market share, ROI, profitability, effectiveness and efficiency. In line with resource-based view theory we can conclude that organizational strategy can be considered as a competitive resource that boosts the organizational performance of Saccos and make the Saccos to have a unique edge against its competitors (Akio, 2005; Barney, 1991; Lin & Wu, 2014).

The findings of this study matched with the research outcomes of Cherop (2018) who observed that the implementation of organizational strategy will improve the business performance of manufacturing firms in Kenya. Moreover, the outcomes of this study were congruent with the observations made by Gikungi et al. (2021) who observed that organizational strategy implementation involving innovative leadership style and a goal-oriented corporate culture boosts organizational performance in the context of Telkom Kenya ltd. The research findings also concurred with the research results of Mutindi et al. (2013) who observed that organizational strategy involving its aspects such as strategic planning and competitive positioning boosts the corporate performance of hotels in the Kenyan coastal region.

# 4.5.2 Influence of Organizational Structure on the Performance of Saccos in Nairobi County, Kenya

The second objective was to evaluate how organizational structure influences the performance of Saccos in Nairobi County, Kenya. The unstandardized beta coefficient of organizational structure presented in Table 4.9 was used by the researcher to address the objective. Organizational structure posted an unstandardized beta coefficient of 0.175, this meant that when organizational structure is increased by only one unit, then the performance of Saccos in Nairobi County will momentously increase by 17.5% (considering that its *p*-value of 0.019 is lower than 0.05). Thus, organizational structure considerably influences the performance of Saccos in Nairobi County, Kenya in a positive manner. The findings meant that Saccos having good structures that eases smooth and clear information to its employees, structures guaranteeing optimal span of control to the top leadership and structures facilitating speedy decision-making process will boost the organizational performance of Saccos in terms of increased market share, ROI, profitability, effectiveness and efficiency. In line with resource-based view theory we can conclude that organizational structure can be considered as a competitive resource that boosts the organizational performance of Saccos and make the Saccos to have a unique edge against its competitors (Akio, 2005; Barney, 1991; Lin & Wu, 2014).

The findings of the study were congruent with Kampini (2018) who observed that organizational structure being cost effective and characterized by uniformity of action in decision-making boosts employee performance. Organizational structure is a clear road map guiding employees in their official reporting relationships that leads to the smooth organizational workflow (Ingram, 2012). An organizational structure that is not well organized spells doom to the firm, since it will consequently experience low productivity (Kampini, 2018). The findings of this study also coincided with Onono (2018) who noted that organizational structure fostering conceivement of lean teams, creation of optimum hierarchy levels, facilitation of optimal span of control for top leadership and speedy decision making boosts organizational performance of General Electric Africa. Besides that, the findings of the study also agreed with Daft (2011) as cited by Onono (2018) that organizational structure with good communication systems and characterized by effective span of control that facilitates effective decision-making process leads to increased firm performance.

## 4.5.3 Impact of Business Process on the Performance of Saccos in Nairobi County, Kenya

The third objective was to establish if business process impacts the performance of Saccos in Nairobi County, Kenya. The unstandardized beta coefficient of business process presented in Table 4.9 was used by the researcher to address the objective. Business process posted an unstandardized beta coefficient of 0.548, this meant that when business process is increased by only one unit, then the performance of Saccos in Nairobi County will momentously increase by 54.8% (considering that its *p*-value of 0.000 is lower than 0.05). Thus, business process considerably impacts the performance of Saccos in Nairobi County, Kenya in a positive manner. This meant that business processes involving frequently collecting and analyzing the external market environment by looking at the economic, technological, environmental and legal factors to the advantage of the Saccos will boost their organizational performance in terms of increased market share, ROI, profitability, effectiveness and efficiency. In line with resource-based view theory we can conclude that business process can be considered as a competitive resource that boosts the organizational performance of Saccos and make the Saccos to have a unique edge against its competitors (Akio, 2005; Barney, 1991; Lin & Wu, 2014).

The findings of the study agreed with the research outcomes of Mbore et al. (2019) who noted that the business processes boosted institutional performance of technical institutes. The findings of this study were also congruent with the research outcomes of Glavan (2017) who confirmed that business processes boosts the performance of both financial firms and non-financial organizations operating in Croatia.

# 4.5.4 Impact of Organizational Culture on the Performance of Saccos in Nairobi County, Kenya

The fourth objective was to determine how organizational culture influences the performance of Saccos in Nairobi County, Kenya. The unstandardized beta coefficient of organizational culture presented in Table 4.9 was used by the researcher to address the objective. Organizational culture posted an unstandardized beta coefficient of 0.257, this meant that when organizational culture is increased by only one unit, then the performance of Saccos in Nairobi County will momentously increase by 25.7% (considering that its *p*-value of 0.000 is lower than 0.05). Thus organizational culture considerably influences the performance of Saccos in Nairobi County,

Kenya in a positive manner. The findings meant that establishing goals applicable to all divisions of the Saccos, having a culture of effectively adapting to changes in the business environment and having a set of values defining the organization's workers, suppliers and customers will boost the organizational performance of the Saccos in terms of increased market share, ROI, profitability, effectiveness and efficiency. In line with resource-based view theory we can conclude that organizational culture can be considered as a competitive resource that boosts the organizational performance of Saccos and make the Saccos to have a unique edge against its competitors (Akio, 2005; Barney, 1991; Lin & Wu, 2014).

The findings agreed with the observations made by Oduol (2015) that a strong organizational culture involving the employees genuinely aligning to the corporate values creates a strong bond between employees and their supervisors thus boosting organizational performance. The research findings also concurred with Daft (2011) as cited by Onono (2018) that good communication systems and effective span of control as elements of organizational culture leads to increased firm performance.

### **CHAPTER FIVE**

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1 Introduction

This chapter presents the summary of findings, conclusion, contribution of the study to knowledge, recommendations for further study.

## 5.2 Summary of Research Purpose and Process

The competitive landscape among Saccos in the country has shifted dramatically in recent years, migrating from a thriving economy with ample credit to one that is reasonably stable. Due to hurdles such as diminishing finances and a more sophisticated digital ecosystem than before, DT-Saccos are being pushed in ways they never envisioned. DT-Saccos must be flexible and quick to reflect the changing industry trends. As a result, BI systems have become a critical component of organizational information dissemination, with the potential to increase productivity and competitiveness. In order to boost organisational excellence, automate customer-Sacco interactions, and adapt to constraints such as competition from multinational companies, dispersed clients, and reposition them to fulfil consumer expectations, DT-Saccos place a major focus on business intelligence systems. Spite of significant ICT integration, little is known about how and to what extent business intelligence has helped Saccos improve their organizational performance.

It is on this background that this study sought to establish the role of business intelligence on the performance of Saccos in Nairobi County, Kenya. The specific objectives were to determine if organizational strategy, organizational structure, business process and organizational culture impacts the performance of Saccos in Nairobi County, Kenya. Descriptive research methods were used in this study. Self-administered questionnaires were used to gather information. Inferential statistics, particularly regression analysis, were utilized to evaluate the nature and degree of the hypothesized correlations between the variables.

To validate the hypotheses, multiple regression models were deployed. The results demonstrated a positive and statistically significant correlation between BI systems and DT-Sacco

performance. All the parameters considered (organizational strategy, structure, business process, and culture) exhibited a significant positive association with firm performance. Moreover, it was apparent that, in contrast to organizational structure, business process, and organizational culture, organizational strategy had the greatest impact on performance; similarly, organizational culture had the least effect. This study provides empirical evidence that BI systems applied in a systematic way can lead to superior organizational performance in the financial sector and more specifically DT-Saccos in Kenya.

# **5.3 Discussion of Research Findings**

# 5.3.1 Impact of Organizational Strategy on the Performance of Saccos in Nairobi County, Kenya

The first objective was to determine if organizational strategy impacts the performance of Saccos in Nairobi County, Kenya. In general, the findings observed that organizational strategy considerably impacts the performance of Saccos in Nairobi County, Kenya in a positive manner. The findings meant that the top leadership being in control of the Saccos' business strategies concentrating on the vision for the future of the Saccos and the Saccos adhering to a well-defined set of procedures in their strategic planning process will boost their organizational performance in terms of increased market share, ROI, profitability, effectiveness and efficiency. In line with resource-based view theory we can conclude that organizational strategy can be considered as a competitive resource that boosts the organizational performance of Saccos and make the Saccos to have a unique edge against its competitors (Akio, 2005; Barney, 1991; Lin & Wu, 2014).

The findings of this study matched with the research outcomes of Cherop (2018) who observed that the implementation of organizational strategy will improve the business performance of manufacturing firms in Kenya. Moreover, the outcomes of this study were congruent with the observations made by Gikungi et al. (2021) who observed that organizational strategy implementation involving innovative leadership style and a goal-oriented corporate culture boosts organizational performance in the context of Telkom Kenya ltd. The research findings also concurred with the research results of Mutindi et al. (2013) who observed that organizational strategy involving its aspects such as strategic planning and competitive positioning boosts the corporate performance of hotels in the Kenyan coastal region.

# **5.3.2** Influence of Organizational Structure on the Performance of Saccos in Nairobi County, Kenya

The second objective was to evaluate how organizational structure influences the performance of Saccos in Nairobi County, Kenya. In a broad-spectrum, the findings observed that organizational structure considerably influences the performance of Saccos in Nairobi County, Kenya in a positive manner. The findings meant that Saccos having good structures that eases smooth and clear information to its employees, structures guaranteeing optimal span of control to the top leadership and structures facilitating speedy decision-making process will boost the organizational performance of Saccos in terms of increased market share, ROI, profitability, effectiveness and efficiency. In line with resource-based view theory we can conclude that organizational structure can be considered as a competitive resource that boosts the organizational performance of Saccos and make the Saccos to have a unique edge against its competitors (Akio, 2005; Barney, 1991; Lin & Wu, 2014).

The findings of the study were congruent with Kampini (2018) who observed that organizational structure being cost effective and characterized by uniformity of action in decision-making boosts employee performance. Organizational structure is a clear road map guiding employees in their official reporting relationships that leads to the smooth organizational workflow (Ingram, 2012). An organizational structure that is not well organized spells doom to the firm, since it will consequently experience low productivity (Kampini, 2018). The findings of this study also coincided with Onono (2018) who noted that organizational structure fostering conceivement of lean teams, creation of optimum hierarchy levels, facilitation of optimal span of control for top leadership and speedy decision making boosts organizational performance of General Electric Africa. Besides that, the findings of the study also agreed with Daft (2011) as cited by Onono (2018) that organizational structure with good communication systems and characterized by effective span of control that facilitates effective decision-making process leads to increased firm performance.

## 5.3.3 Impact of Business Process on the Performance of Saccos in Nairobi County, Kenya

The third objective was to establish if business process impacts the performance of Saccos in Nairobi County, Kenya. In general the findings observed that business process considerably impacts the performance of Saccos in Nairobi County, Kenya in a positive manner. This meant that business processes involving frequently collecting and analyzing the external market environment by looking at the economic, technological, environmental and legal factors to the advantage of the Saccos will boost their organizational performance in terms of increased market share, ROI, profitability, effectiveness and efficiency. In line with resource-based view theory we can conclude that business process can be considered as a competitive resource that boosts the organizational performance of Saccos and make the Saccos to have a unique edge against its competitors (Akio, 2005; Barney, 1991; Lin & Wu, 2014).

The findings of the study agreed with the research outcomes of Mbore et al. (2019) who noted that the business processes boosted institutional performance of technical institutes. The findings of this study were also congruent with the research outcomes of Glavan (2017) who confirmed that business processes boosts the performance of both financial firms and non-financial organizations operating in Croatia.

# 5.3.4 Impact of Organizational Culture on the Performance of Saccos in Nairobi County, Kenya

The fourth objective was to determine how organizational culture influences the performance of Saccos in Nairobi County, Kenya. In a broad-spectrum, the findings observed that organizational culture considerably influences the performance of Saccos in Nairobi County, Kenya in a positive manner. The findings meant that establishing goals applicable to all divisions of the Saccos, having a culture of effectively adapting to changes in the business environment and having a set of values defining the organization's workers, suppliers and customers will boost the organizational performance of the Saccos in terms of increased market share, ROI, profitability, effectiveness and efficiency. In line with resource-based view theory we can conclude that organizational culture can be considered as a competitive resource that boosts the organizational performance of Saccos and make the Saccos to have a unique edge against its competitors (Akio, 2005; Barney, 1991; Lin & Wu, 2014).

The findings agreed with the observations made by Oduol (2015) that a strong organizational culture involving the employees genuinely aligning to the corporate values creates a strong bond between employees and their supervisors thus boosting organizational performance. The research findings also concurred with Daft (2011) as cited by Onono (2018) that good communication systems and effective span of control as elements of organizational culture leads to increased firm performance.

### **5.4 Conclusion**

As a result, there is an inescapable demand to use BI solutions. Saccos should strategically position themselves to increase their effectiveness, preserve a competitive edge, and prosper in today's competitive yet hard environment. If Saccos in Kenya want to thrive, they must start looking at new and viable business models as a result of these changes. Saccos use business intelligence tools to improve organizational performance, update customer interactions, and react to difficulties like as globalization and fragmented clientele, all while repositioning themselves to meet customer expectations. The correlation between business intelligence and performance in Saccos in Nairobi County, Kenya was investigated systematically in the study. The researcher inferred crucial conclusions based on the evidence.

The results of this study reveal that business intelligence systems, such as strategy, structure, process, and culture, have a direct influence on corporate performance. In regard of the first objective, strategy is statistically significant, implying that strategy and performance are linked. Structure is also statistically significant in terms of the second objective, implying that there is a link between structure and performance. Furthermore, process is statistically significant on the basis of the third objective, and so there is a link between process and performance; and culture is statistically significant on the basis of the fourth objective, and thus there is a relationship between culture and performance.

As a result, the study shows that employing BI systems has a favorable influence on a company's productivity. There was wide consensus that BI systems can help a company boost revenue by improving accounting analysis and reporting, lower expenses by improving stock management, and help it compete more successfully by implementing improved business strategies. The research also suggests that BI systems aid in informed decision-making by assisting workers in comprehending the organization's aims and objectives, hence improving the organization's

efficiency and effectiveness. In any corporation, implementing a business intelligence system is a crucial step.

# 5.5 Recommendation for Policy and Practice

The conclusions of this study have significant policy and practical implications for Saccos and other Kenyan enterprises who want to improve their business intelligence systems and performance.

In the face of challenges such as globalization, deregulation, mergers and acquisitions, non-financial organization rivalry, and technology innovation, the financial services sector continues to adapt, prompting organizations to reassess their strategy. The financial industry has recently placed fraud detection and prevention, risk management, client management, product management, and loss prevention at the top of its priority list. Business intelligence frameworks were not endorsed by the Kenyan Bankers' Association Sacco until 2021, signaling the onset of the Saccos' digital transformation journey. As such, Saccos and other organizations should overcome the technical and organizational hurdles of implementing BI in order to gain effective use of it, as BI enhances business performance and enhances overall productivity.

Because business intelligence systems are advantageous in the financial sector, particularly in DT-Saccos, more effort and resources should be invested to ensure that the industry's implementation of the technologies is sustainable. Sacco management must extensively engage low-level personnel in strategic business planning. Business intelligence systems improve inter-departmental collaboration. As a result, BI systems must be properly linked with the organization's business strategy and core competencies in order to fulfil their full potential in planning effectiveness.

## **5.6 Suggestions for Further Study**

Future research should focus on replicating this study's results and conclusions in other Kenyan organizations and sectors of the economy. This study focused on the influence of business intelligence on performance confined to the case of DT-Saccos in Nairobi City County. Therefore, this study recommended that a similar study should be carried out on the effectiveness of Business intelligence in the financial sector as a whole to include the banks.

This will enable for generalization of the study findings on the effectiveness of Business Intelligence on firm performance of the financial sector. In addition, further study should be done to look at the moderating and mediating effects of different variables on the link between business intelligence and performance.

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**APPENDICES** 

**APPENDIX I: Researcher's Introduction Letter** 

To whom it may concern

Dear Sir/Madam

RE: REQUEST TO COLLECT DATA ON THE BUSINESS INTELLIGENCE ON THE

PERFORMANCE OF SAVINGS AND CREDIT COOPERATIVE ORGANIZATIONS IN

NAIROBI CITY COUNTY, KENYA.

I am a Master student enrolled at Kenyatta University undertaking Master of Business

Administration (MBA). One of the conditions that a student has to fulfill before earning a Master

degree in Business Administration, one is required to write, defend a research proposal and

collect data for analysis and presentation. I am carrying out a research inquiry as highlighted on

the subject matter of the letter.

With due respect, I'd like to enlist your assistance in completing our research surveys in order to

collect data from your firm. We promise to keep your information private and only use it for

scholarly purposes. Neither you nor your business will be specifically mentioned in the report.

Thank you on advance.

Yours Sincerely,

**Ondiek James** 

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## **APPENDIX II: Research Questionnaire**

This study probes how business intelligence affects the organizational performance of Saccos in Nairobi County, Kenya.

#### **Instructions**

Tick ( $\sqrt{}$ ) inside the brackets, boxes or columns where it is suitable to indicate your response. On the other hand you are required to write down your responses in sections containing open-ended questions.

#### **SECTION A: Background**

1)	(a) Are you a Male? or are you Female?
	(b) How many years of professional experience have you gained so far?
	I have worked for less than 5 years
	I have worked in this profession for only 5 to 10 years
	I have worked in this profession for 10 to 15 years
	I have worked in this profession for at least 15 years
	(c) Which department do you work for?
	Finance
	Human Resource
	Marketing
	ICT
	Operations —

## **SECTION B: Organizational Strategy**

2) The following statements are about organizational strategy in Saccos operating in Nairobi County. To what extent do you agree with the statements pertaining to your organization? (Coded as; 1 = I admit that I strongly disagree with the statement "SDIS", 2 = I wholly admit that I do disagree with statement "DISAG", 3 = I neutrally agree with the statement "NEUL", 4 = I wholly admit that I do agree with the statement "AGR", 5 = I admit that I strongly agree with the statement "SAGR").

SDIS	DISAG	NEUL	AGR	SAGR

The strategic business strategy is the responsibility of the top management.					
Having a written mission statement improves organizational performance					
Strategic planning increases Sacco performance when resources such as available funds, the staff input and the managers' time are set aside expressly for it.					
Strategic planning is a high- priority task that must be completed on a regular basis.					
The Sacco follows a defined set of procedures in its strategic planning process					
Sacco performance is improved by following a specified set of processes during the strategic planning process.					
The Sacco systematically performance versus goals set					
Systematically measuring actual performance vs. goals set improves organizational performance.					
The Sacco actively develops new					
The Sacco is constantly seeking new market opportunities for growth					
The organization strategy is clearly articulated by the management In your view, how does the busine	agg atmata a	adapted affact	nouformor	in this Soc	202

growth								
The organization strategy is clearly articulated by the management								
In your view, how does the busine	In your view, how does the business strategy adopted affect performance in this Sacco?							
		83						

3)

4)	Does the organization maintain a strategy document? Who is in charge of strategy
	implementation in this organization?

## **SECTION C: Organization Structure**

5) The following statements are about organizational structure in Saccos operating in Nairobi County. To what extent do you agree with the statements pertaining to your organization? (Coded as; 1 = I admit that I strongly disagree with the statement "SDIS", 2 = I wholly admit that I do disagree with statement "DISAG", 3 = I neutrally agree with the statement "NEUL", 4 = I wholly admit that I do agree with the statement "AGR", 5 = I admit that I strongly agree with the statement "SAGR").

	SDIS	DISAG	NEUL	AGR	SAGR
The Sacco has good structures that enable and facilitate flow of information to its employees					
The organizational structure of Sacco impacts decision-making speed.					
The Sacco's organizational structure supports the creation of lean teams.					
The Sacco's organizational structure promotes efficient work completion.					
The Sacco's organizational structure allows all of the company's leaders to have a wide range of control.					
The organizational structure of Sacco helps the leadership team's success in realizing strategic goals.					

The organization structure at the Sacco fosters effective execution of global strategic decisions.				
Decision-making that is centralized rather than decentralized is more costeffective.				
The Sacco's decision-making and plan implementation are slowed b structure.				
The most effective approach to improve Sacco performance is to have numerous hierarchical layers.				
Having fewer hierarchical levels is the most efficient way of improving firms performance				
In your view, how do organization	nal structures and rep	orting channels at	fect perform	nance in
this Sacco?				

#### **SECTION D: Business Process**

7) The following statements are about business process in Saccos operating in Nairobi County within the organization. To what extent do you agree with the statements pertaining to your organization? (Coded as; 1 = I admit that I strongly disagree with the statement "SDIS", 2 = I wholly admit that I do disagree with statement "DISAG", 3 = I neutrally agree with the statement "NEUL", 4 = I wholly admit that I do agree with the statement "AGR", 5 = I admit that I strongly agree with the statement "SAGR")

	SDIS	DISAG	NEUL	AGR	SAGR
The Sacco collects and analyzes market and					

other external factors that impact the business on a regular basis.			
Sacco performance is improved by obtaining and evaluating data about the market and other external elements that impact the business on a regular basis.			
Environmental factors (political, social, economic, environment and legal) affect organizational performance.			
Political factors (political climate, tax policies, trade restrictions, tariffs, and political stability) affect the performance of this organization.			
Economic factors ( economic growth, interest rates, exchange rate and inflation rates) affect the performance of the this organization			
Technological factors (ecological and environmental aspects, incentive rates on technology, rate of technological change and development) affect the performance of the this organization			
Legal factors (consumer laws, antitrust laws, Finance bills, and health and safety laws) affect the performance of this organization.			

## **SECTION E: Organizational Culture**

8) The following statements are about organizational structure in Saccos operating in Nairobi County. To what extent do you agree with the statements pertaining to your organization? (Coded as; 1 = I admit that I strongly disagree with the statement "SDIS", 2 = I wholly admit

that I do disagree with statement "DISAG", 3 = I neutrally agree with the statement "NEUL", 4 = I wholly admit that I do agree with the statement "AGR", 5 = I admit that I strongly agree with the statement "SAGR")

	SDIS	DISAG	NEUL	AGR	SAGR
The Sacco has established goals for which it aspires, goals that are applicable to all divisions of the organization.					
Organizational culture management is a crucial component of organizational performance.					
Organization culture enhances organizational performance in the organization					
The values of consistency, flexibility, and an effective communication system govern this Sacco.					
The way things are done a determined by its culture.					
The Sacco has a set of values that define who its workers, customers, and suppliers are, as well as how they interact with one another.					
Employees at the Sacco have a strong feeling of belonging, which motivates them to work more.					
Innovation is highly encouraged at my workplace					
This Sacco adapts effectively to changes in the business					

environment, including rivals.			
The Sacco ensures that activities and efforts are coordinated throughout the organization's various divisions so that "the right hand knows what the left hand is doing.			

## **SECTION F: Organizational Performance**

9) To what extent do you agree with the statements pertaining to your organization? Please tick ( $\sqrt{}$ ) the box with a number from the scale below that best describes your response. (Coded as; 1 = I admit that I strongly disagree with the statement "SDIS", 2 = I wholly admit that I do disagree with statement "DISAG", 3 = I neutrally agree with the statement "NEUL", 4 = I wholly admit that I do agree with the statement "AGR", 5 = I admit that I strongly agree with the statement "SAGR")

	SDIS	DISAG	NEUL	AGR	SAGR
The market share of my Sacco has been gradually expanding.					
In every financial year the Sacco's return on investment has been improving.					
The overall profitability of the Sacco together with its liquidity ratios has been gradually improving in every financial year.					
The efficiency in terms of minimization of wastage and effectiveness in the Sacco's business activities has been always improving.					

	The tasks of the Sacco has been greatly automated.					
<b>10</b> )	Outline how Business Intelli	gence has co	ontributed to or	ganizational p	erformance of	of this
	Sacco					
11)	Do the Business Intelligence Explain	system ado	pted by the Sac	cco aid you in	decision mak	?

# APPENDIX III: List of Savings and Credit Cooperatives in Nairobi County, Kenya (2019)

SACCO SOCIETIES REGULATORY AUTHORITY					
Directory Of Licensed Savings and Credit Cooperatives, Nairobi County, Kenya					
Afya Sacco Society Limited	2. Airports Sacco Society Limited				
Peer Group: Large	Peer Group: Small				
3. Ardhi Sacco Society Limited	4. Asili Sacco Society Limited				
Peer Group: Medium	Peer Group: Medium				
5. Chai Sacco Society Limited	6. Chuna Sacco Society Limited				
Peer Group: Medium	Peer Group: Medium				
7. Comoco Sacco Society Limited	8. Elimu Sacco Society Limited				
Peer Group: Small	Peer Group: Medium				
9. Hazina Sacco Society Limited	10. Jamii Sacco Society Limited				
Peer Group: Large	Peer Group: Medium				
11. Kencream Sacco Society Ltd	12. Kenpipe Sacco Society Limited				
Peer Group: Small	Peer Group: Medium				
13. Kenversity Sacco Society Limited	14. Kenya Bankers Sacco Society Limited				
Peer Group: Medium	Peer Group: Large				
15. Kenya Police Sacco Society Limited	16. Magereza Sacco Society Limited				
Peer Group: Large	Peer Group: Large				
17. Maisha Bora Sacco Society Limited	18. Metropolitan National Sacco Society				
Peer Group: Medium	Peer Group: Large				
19. Mwalimu National Sacco Society Ltd	20. Mwito Sacco Society Limited				
Peer Group: Large	Peer Group: Medium				
21. Nacico Sacco Society Limited	22. Nafaka Sacco Society Limited				
Peer Group: Medium	Peer Group: Small				
23. Nssf Sacco Society Limited	24. Nation Sacco Society				

Peer Group: Medium	Peer Group: Medium		
25. Nyati Sacco Society Limited	26. Safaricom Sacco Society Limited		
Peer Group: Medium	Peer Group: Large		
27. Sheria Sacco Society Limited	28. Shirika Sacco Society Limited		
Peer Group: Large	Peer Group: Medium		
29. Shoppers Sacco Society Limited	· · · · · · · · · · · · · · · · · · ·		
(Formerly	Peer Group: Large		
Naku Sacco Society Limited )			
Peer Group: Medium			
31. Taqwa Sacco Society Ltd	32. Telepost Sacco Society Limited		
Peer Group: Medium	Peer Group: Medium		
33. Tembo Sacco Society Limited	34. Ufanisi Sacco Society Limited		
Peer Group: Medium	Peer Group: Small		
35. Ukristo Na Ufanisi Wa Anglicana	36. Ukulima Sacco Society Limited		
Sacco	Peer Group: Large		
Society Limited			
Peer Group: Medium			
37. Unaitas Sacco Society Limited	38. Un-Sacco Society Limited		
Peer Group: Large	Peer Group: Large		

**Source**: SASRA Annual Supervision Report, 2019

## **APPENDIX IV: Work Plan**

	Period					
Research Activity	August to December 2021	December 2021 to February 2022	February to April 2022	April to May 2022	June 2022	
Reviewing various research journals and research reports through desktop research, typing, editing and printing the proposal.						
Collection of data from the 190 targeted respondents working in the 38 Saccos situated in Nairobi County.		$\sqrt{}$				
Data input concerning each variable in SPSS and performing the suitable data analysis techniques.						
Compilation of the final thesis involving paraphrasing the plagiarized areas in the document, incorporation of tables and a write-up of the data analysis results together with printing the final work.						
Submitting final revised thesis.						

# **APPENDIX V: Research Budget**

Activity	<b>Expense in Kenyan Shilling</b>
Reviewing various research journals and research	30,000
Reports through desktop research, typing, editing And printing the proposal	
Collection of data from the 190 targeted respondents Working in the 38 Saccos situated in Nairobi County	35,000
Data input concerning each variable in SPSS and Performing data analysis techniques	25,000
Compilation of the final thesis involving paraphrasing The plagiarized areas, incorporation of tables and a write-up of the data analysis results together with printing of the final work	30,000
Other expenses	15,000
TOTAL	135,000