EFFECT OF ORGANIZATIONAL STRATEGIC RESOURCES ON THE PERFORMANCE OF DEPOSIT TAKING SACCOS IN KENYA

MICHAEL MUTUA KISWILI

DOCTOR OF PHILOSOPHY

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Effect of Organizational Strategic Resources on the Performance of Deposit Taking SACCOS in Kenya

Michael Mutua Kiswili

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

Signature……..……. Date……

Michael Mutua Kiswili

This thesis has been submitted for examination with our approval as University Supervisors.

Signature……..……. Date……

Prof. Mike Iravo Amuhaya, PhD

JKUAT, Kenya

Signature……..……. Date……

Dr. Noor Ismail, PhD

JKUAT, Kenya

Signature……..……. Date……

Dr. Anaya Senelwa, PhD

JKUAT, Kenya

DEDICATION

This thesis is dedicated to my wife and friend Penina Kiswili and to my beloved children Lillian, Joseph, Daisy and Brian for the great and many sacrifices they made during the process of completing the Thesis. Their support, encouragement, concern, enthusiasm and love motivated me to put more effort in completing the entire doctoral program.

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LIST OF ABBREVIATIONS AND ACRONYMS

DITCs	Division of Information Technology and Communication Services
DT-SACCOs	Deposit Taking Savings and Credit Cooperative Societies
GDP	Gross Domestic Product
HR	Human Resource
HRM	Human Resource Management
ICT	Information and Communication Technology
ISE	Istanbul Stock Exchange
IT	Information Technology
KMTC	Kenya Medical Training Institute
NACOSTI	National Commission for Science, Technology and Innovation
NPL	Non-Performing Loans
OLS	Ordinary Least Squares
R&D	Research and Development
RBV	Resource-Based View
ROA	Return on Assets
ROI	Return on Investment
SACCOs	Savings and Credit Cooperative Societies
SASRA	Sacco Societies Regulatory Authority
SD	Standards Deviation
SEM	Structural Equation Modeling
SMEs	Small and Medium Enterprises

UTAUT Unified Theory of Acceptance and Use of Technology

DEFINITION OF TERMS

Financial Resources: Refers to source of funds and availability of funds in an organization or business unit and timely release of funds to utilize in improving on its productivity and are easily accessible to management for the right allocation (Abiodun, 2013). This represents total financial funds in a firm and they consist of cash and cash equivalents, stock holdings, bond holdings and foreign currency holdings and credit lines signed with leading financing institutions.

Firm Size: This is the firm's magnitude, dimensions or proportions that might include a corporation, partnership or limited liability firm. The size is measured in terms of the number of staff it has employed, its net assets together with its capital base (Akhavana & Eslamifara, 2015). It is how big or small a firm is in terms of amount of sales, market share, total assets, number of employees and also level of capitalization.

Human Capital: This is the adequacy of staff, experience and stock of competency skills such as creativity that enable an organization to carry out a task so as to generate economic values (Bakri, 2017). In this study it has applied as the intangible asset of a firm in terms of staff's knowledge, skills and experience.

Performance: Performance has been defined as effectiveness and efficiency of resource utilization to achieve financial performance, internal business process improvement and customer satisfaction (Dogan, 2013). It is achievement of goals and objectives in an organization in terms of profitability, market share and efficiency.

Physical Resources: These are equipment and tools in an institution used to make daily activities much quicker and easier or are used to operate the business or provide products and services among consumers (Ezeugbor & Okorji, 2014). It includes the tangible material assets belonging to a firm such as office furniture, materials, manufacturing equipment, buildings and information technology equipment like computers and printers.

Strategic Resources: This is the capability and capacity of an organization in terms of availability, adequacy and timely release of human resource, technological resource, physical resource and financial resource (Gruber, Heinemann & Hungeling, 2015).This encompasses firm's resources that enable the realization of strategic goals hence promoting sustainable competitive advantage.

Technological Resources: These possess attributes of integration, alignment, compatibility, ease of use and functionality in order to facilitate acquisition, processing, retrieval and communication of data to be used in making decisions as per the firm's strategy of offering efficient services (Andersén, 2011).

ABSTRACT

Deposit taking SACCOs significantly impact on growth and development of the Kenyan economy. Despite having various strategic resources DT SACCOs in Kenya are still experiencing poor performance in terms of returns on investments, customer satisfaction and efficiency in service delivery. The general objective of this study was to examine what effect organizational strategic resources have on the performance of deposit taking SACCOs in Kenya. The specific objectives of this study were to: assess the effect of financial resources on the performance of deposit taking SACCOs in Kenya; determine the effect of human capital on the performance of deposit taking SACCOs in Kenya; establish how technological resources affect the deposit taking SACCOs in Kenya; examine the effect of physical resources on the performance of deposit taking SACCOs in Kenya; and evaluate the moderating effect of firm size on the relationship between organizational strategic resources and performance of deposit taking SACCOs in Kenya. This study used a descriptive explanatory research design and pragmatic research paradigm. The key respondents included finance, human resource, ICT managers and chief accountants in the selected 84 deposit taking SACCOs in five Counties in Kenya. The study used purposive sampling and stratified random sampling method to select 184 managers from the target population. Semi structured questionnaire was employed to collect primary data while secondary data for the study was collected using data extraction tools. Quantitative data analysis was done using inferential and descriptive statistics. Descriptive statistics included percentages, frequency distribution, mean, and standard deviation. Multiple regression analysis and univariate regression analysis were employed for analysis of inferential data. SPSS software was used in the analysis. This study found that human capital has positive and significant effect on the performance of deposit taking SACCOs in Kenya (r^2=0.190, p-value=0.000). In addition, the study also established that financial resources have positive and significant effect on the performance of deposit taking SACCOs in Kenya (r^2=0.131, p-value=0.000). Further, the study revealed that technological resources have a positive and statistically significant effect on the performance of deposit taking SACCOs in Kenya (r^2=0.089, p-value=0.000). Also, the study revealed that physical resources have a positive and statistically significant effect on the performance of deposit taking SACCOs in Kenya (r^2=0.0153, p-value=0.000). The study also found that firm size has a significant moderating effect on the relationship between organizational strategic resources and performance of deposit taking SACCOs in Kenya. The study concludes that organizational resources have a positive and significant effect on performance of deposit taking SACCOs in Kenya. The study recommends that budgets and budget reviews should be carried out and approved on a timely basis to facilitate regular release of finances by the finance managers to ensure smooth and efficient service delivery. Further, SACCOS should extend incentives to their members and customers to increase their savings and deposits with them. Similarly policy makers should look into ways of boosting SACCOs' asset and membership by encouraging Sacco mergers and even acquisitions.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The Cooperative movement emerged in Europe early 19th century in the wake of industrial revolution to cushion workers and peasant farmers from the vagaries of mechanization and profiteering. It has since then grown in leaps and bounds and it is estimated that 1 in every 7 citizens of the world is member of a cooperative society (International Cooperative Alliance, 2012). Cooperative refers to autonomous association among individuals who are interested in meeting their cultural, social and economic needs through investing in jointly owned enterprise (Moturi & Mbiwa, 2015). Members pool their resources together to achieve economies of scale and scope thereby achieving efficiencies and cost savings. Cooperatives have been used by governments with considerable success as a vehicle for national development and poverty reduction mainly due to their ability to penetrate down to the grassroots and to individual households (Yousaf & Iftikhar, 2018).

Cooperatives are to be found in different sectors of the economy, namely agriculture, housing development, financial, insurance, Jua Kali, building and construction, consumer services, transport and handicraft. Cooperatives are so pervasive that worldwide they provide employment to about 300 million people, which is over 20% more than that provided by the multinationals. In Europe they have a major stake in consumer, banking, and insurance businesses. For example, in Germany one in every four citizens is a member of a cooperative (Mathuva, Muthuma & Kiweu, 2016).

The growth of the movement and its critical role in national development and the need to minimize costs and to maximize benefits to members, has brought the management and corporate governance of SACCOs into sharp focus particularly since the sector was liberalized in 1990's. They too suffered the negative impact of the economic crisis of

1990s and 2000s, and indeed have seen some become dormant or wither away altogether. In addition, the ongoing globalization, trade liberalization, and advancement in technology have meant that the movement no longer enjoys the benefits of state protection that existed hitherto when they operated under monopolistic conditions. The new operating environment and the need to survive and continue delivering comparable benefits to members compelled cooperatives to embrace same management principles and techniques practiced by for-profit enterprises with which they compete for resources and customers.

Despite significant investments in training, capacity building, and resource deployment, cooperatives have tended to function within a tight framework with goals and objectives that are not clearly defined or backed up by well-articulated strategies (Mathuva, Muthuma & Kiweu, 2016). They were set up to work in identical ways, with standardized organizational structures and socialite policies that didn't match outcomes with inputs. However, because of the one-member-one-vote system, few suitable people were elected to Management Committees, and as a result, they were unable to employ competent personnel to oversee their operations (Marwa & Aziakpono, 2015). This coupled with the intense government control, cooperatives were ill prepared to face the challenges of liberalization and price decontrols. This compelled cooperative managers to seek appropriate strategies to harness resources at their disposal for increased and sustainable benefits to their members.

SACCOs have individual goals and objectives and they possess different configurations of strategic resources and organizational capabilities. In pursuit of their goals they will develop appropriate strategies to optimally apply their resources and capabilities. Resources are organizational assets and are thus, what constitutes the organization (Moturi & Mbiwa, 2015). The resource-based view (RBV) of the firm is a key theory that is widely used when it comes to the field of strategic management. SACCOs could variously be endowed with a strong/weak capital base, skilled personnel, a strong focused leadership or a vibrant branch network. As such RBV has become a dominant theory upon which firm performance arguments have been grounded.

Routines and systems that allow resources to collaborate and transform inputs to outputs make up capabilities. These may include cutting-edge IT systems or a contemporary product design department backed by a strong marketing staff. As a result, it's crucial that resources and capabilities are produced, deployed, and exploited in a coordinated manner. Scholars and academicians in the management field are in agreement that capabilities can be a source of great performance for a firm. According to Marwa and Aziakpono (2015) configurations arise out of insight, change, inspiration and/or trial and error, where old combinations of strategies and resources are realigned or dropped all together and new configurations adopted. Those cooperatives which adopt a dynamic approach to management are likely to quickly react to changes in the environment thereby gaining advantage to wither any turbulence.

In the past cooperative societies have applied the concepts of strategy, whether by deliberate design, or by managers intuitively reacting to changes in operating dynamics, to drive their organizational goals (Moturi & Mbiwa, 2015). Similarly different cooperatives have been endowed with varying levels of resources, and in their endeavor to maximize benefits to their member**s,** have exploited them with mixed results. Cooperatives which are more professionally run employ the elements of strategy, resource configuration and organizational capabilities to achieve desired outcomes. In the past many of these might have unconsciously applied some of these elements without being aware of the underlying theoretical relationships.

1.1.1 Global Perspective on Organizational Strategic Resources

In the United States, Gruber, Heinemann and Hungeling (2015) indicate that based on a careful measurement of resources in notable and operational areas like sales and distribution, resources and capabilities contribute significantly to performance in that functional area. Similarly, Bakri (2017) highlighted that physical, tangible resources, intangible resources and human resources lead to a competitive advantage among firms. In addition, Black and Boal (2012) found that resources include factor networks whose relationships are both inter-factor and inter-resource which lead to the traits that are

found in the resources. Some of the factor relationships are the likes of contingency relationships, available substitutes and the type of network relationships (enhancing, suppressing and compensatory). Notable configurations that result to great support for sustainable competitive advantage are proposed.

In China, Li, Zhou and Tian (2018) indicate that technological configuration capability improves the influence of strategic flexibility on the performance of a firm in an every changing environment. In another study, Yang, Zhao and Sun (2012) found the various ways resources are configured result to different influence on the performance of a firm. The link between ROA and the configuration of the resources change with time. During the resource configuration early stages the ROA and focus level is positive but as time elapse this relationship turns negative. In the short run ROA and related level of diversification is negatively related but the relationship changes again to a positive one as time elapses.

In Netherlands, Furrer, Sudharshan and Alexandre (2016) indicate that some organisations that are close when it comes to strategy space have different configurations when it comes to their resources; organisations that have a similar resource configuration which means are closely related when it comes to the resource space but in terms of performance they are distant from each other. In Taiwan, Feng and Pan (2019) indicate that operational, marketing, management and human resources and capabilities favourably influence an organisations performance. In addition, both management and physical capital resources have no significant effect on the performance of the organisation.

In Sweden, Andersén (2011) points out that strategic resource can be acquired in three ways; through positioning of the product market, direct investments and through the processes of the firm. In addition, Andersén (2011) established that a positive relationship does exist between the performance of an organisation and its strategic resources. In the United Kingdom, Marr (2005) indicates that better understanding of the tangible and intangible architecture which is the strategic resource helps to clarify the

creation of value and helps in the effective use of resources for best results. In India, Bamel and Bamel (2018) indicates that there is a positive and significant relationship between knowledge management and strategic flexibility and capability acts as the mediator between the relationships.

In Malaysia, Alnachef and Alhajjar (2017) indicate that human capital in terms of learning and education, skills development, creativity and innovation, and adequacy of staff has a positive influence on performance of firms. In Islamabad, Arsalan, Awan and Sarfraz (2018) found that human capital investments in terms of training, remuneration, rewards, experience and adequacy of staff affects employee performance positively, which in turn affects organizational performance. In China, Fonseka, Tian and Li (2014) found that financial resource in terms of sourcing, budgeting and timely release of finances affects the performance of firms.

1.1.2 Regional Perspective on Organizational Strategic Resources

One of the main problems that African firms have to deal with is adequacy of resources including financial resource, technological resource, physical assets and competent human resource. For instance, Parent, Fromageot and Ketele (2015) indicate that human resources found in the sub-Saharan parts of Africa are inadequate when it comes to the needed skills compared to the health care and professional needs of the population. In Rwanda, Siborurema, Shukla and Mbera (2015) highlight that lack of adequate financial resources and low financial literacy had a negative effect on scheduled projects implementation time and hence organizational performance.

In Nigeria, Ezeugbor and Okorji (2014) indicate that the availability of physical resources in the country's institutions of higher learning was wanting and the few available resources were not well maintained. They recommended that to improve performance the management of the university together with the government should provide enough resources and give more attention to the management of these resources since this will see the university objectives met. Further it is essential that skilled

employees be given jobs to maintain the resources and ensure they are well used. Oghojafor, Kuye and Ogunkoya (2014) also indicate that technological capabilities, as an organization's strategic resource, go a long way in influencing the performance of organizations. In addition, Gaotlhobogwe (2017) indicates that lack of resources including financial resources, physical assets (equipment), technological resources and human resources negatively affected performance in Botswana.

In Ghana, Amoah-Mensah (2013) indicates that firms' internal and external resources influence the performance of SMEs in the rural areas. Customer satisfaction, profits and stock turnover were the performance measures used and they were shown to be influenced by experience, cash and opening time. The SMEs opened their premises at hours that suited their customers which led to a rise in the customer satisfaction and additionally resulted to increased sales due to the high stock turnover rates. Bagire and Namada (2013) found that there was a positive and significant relationship that existed between performance and managerial skills in Uganda. However, the results also showed an insignificant relationship with financial capability. The study also noted that financial capability was not a notable predictor of strategic planning. However managerial skills were a significant predictor in this case of strategic planning. In addition, Kiowi, K'Obonyo and Ogutu (2016) note that human resource strategic orientation which is related to commitment and control is positively and significantly related to the performance of employees at work.

In addition, Abdulrahman and Bamiduro (2018) found that financial resource allocation measured in terms of revenue from internal sources, sourcing of funds, adequacy of funds and budgeting had an effect on the effectiveness and performance of firms. In Ghana, Adomako and Danso (2014) established that financial literacy favorably affects the performance of organizations especially if the business owners can easily access funds and if they have flexible resources at their disposal. In addition, Preko (2014) established that human resource development done through training, shadowing and mentoring had a significant effect on the performance of Kwame Nkrumah University of Science and Technology. Further, Ringim, Dantsoho and Tyoapine (2017) indicate that

the relationship was found to be more favorable when it came to flexibility of the IT infrastructure, followed by the expertise of the IT staff members, followed by the capability of managing IT and lastly creation of IT knowhow.

1.1.3 Local Perspective on Organizational Strategic Resources

Njagi (2018) indicates that institutions which invest and maintain enough and quality strategic resources such as ICT, human, physical and financial resources will realize better performance than those which do not. In addition, institutions which prudently deploy, develop, combine and coordinate strategic resources will perform better than those which do not. In addition, Kogo and Kimencu (2018) suggest that proper linkage between human resources and the performance of the firm will see the managers in charge of human resource come up with programs that will be used to improve the operations and performance of the organization in insurance companies. In addition, technological capability, which is the ability to manage three resources (Information Technology (IT) people's skills when it comes to ICT, infrastructure and the firm's capability of manipulation of IT) affects organizational performance positively. Further, Masaba and Kilika (2016) argue that an organization can achieve a sustained great performance if the organization repeatedly uses its resources and seeks to meet its dynamic customer needs to achieve a competitive advantage.

Makanga (2011) found that adoption of strategic resources and capabilities allows a firm to be at an advantage compared to its competitors through being able to focus target clients much more effectively, customer satisfaction, customer retention, market share and product prices being more competitive due to cost leadership advantage. Gakenia (2015) found that human resources positively influenced the mobile phones organizations and hence there was need for the firms to invest in the latest technology to cope with the dynamic environment and eventually improve their performances. Odhon'g and Omolo (2015) indicate that human capital investment in terms of quality education provision, skills development; social networks and experience have a significant effect on pharmaceutical companies' performance. In addition, Njagi (2018)

confirmed that physical resources measured in terms of availability, adequacy, quality and maintenance had a positive influence on performance of public health institutions. Also, Kogo and Kimencu (2018) found that technological capability measured in terms of Information Technology (IT) infrastructure, ability of the firm to manipulate IT, skills of the employees to be able to use IT significantly affect the performance of the insurance companies. Further, Maithya (2016) postulates that human resources measured in terms of adequacy, skills and competence had a significant effect on performance.

1.1.4 Performance of Deposit Taking SACCOs in Kenya

Deposit taking SACCOs in Kenya use different measures of performance, which include total assets, net loans and advances, total loans, market share, non-performing loans and total deposits to total loans ratio. The year 2017 saw the financial performance of the DT-SACCOs continue to rise at an acceptable pace however compared to the growth in the previous years, there was a general decline in the growth rate. The growth of the total assets for the DT-SACCOs was at Kshs 442.27 Billion from Kshs 393.29 Billion in 2016 showing a 12.4% growth rate. The previous year the assets had grown with a 14.8% rate which showed a drop in growth rate by 24% (Sacco Societies Regulatory Authority, 2017).

Net loans and advances remained the key component of the assets portfolio of DT-SACCOs accounting for 72.46% of total assets, thereby cementing the focus of SACCOs on their core mandate of savings mobilization and advancing of loans and other credit facilities. The aggregate cash and cash equivalent component of the total asset base registered a marginal increase to reach 8.96% of the total assets as at December 2017, contrasted to 8.57% recorded in 2016 (Sacco Societies Regulatory Authority, 2017).

The gross loan portfolio also increased by 11.3% in 2017 to reach Kshs 331.21 Billion from Kshs 297.6 Billion recorded in 2016. The loan portfolio was however principally funded by deposits which registered an aggregate growth of 12.01% to reach Kshs 305.3

Billion in 2017 from Kshs 272.58 Billion recorded in 2016. The growth rates in both the gross loans and the total deposits however registered a decline in 2017; the total of which shows a relatively very difficult year (Sacco Societies Regulatory Authority (2017). A slight deterioration of the asset quality, measured by loan quality was however recorded with the non-performing loan ratio increasing to 6.14% in 2017 from the 5.23% recorded in 2016. This increase in the aggregate NPLs is principally attributed to the spike in the NPLs among the Community-based, the Private-sector based, and the Government-based SACCOs, which experienced a relatively tough year (Sacco Societies Regulatory Authority, 2017).

1.1.5 Deposit Taking SACCOs in Kenya

In Kenya, deposits taking SACCOs have witnessed a fast growth in the recent past. SACCOs are formed by members with the objective of mobilizing savings for the purpose of creating sources of credit for its members at competitive rates of interest (Moturi & Mbiwa, 2015). Since many of the members tend to be in low income brackets, by their very nature, SACCOs are aimed at alleviating poverty. They are part of the co-operative movement which supports 45% of Kenya's economic activities, and it is therefore one of the options for achieving sustained economic growth (Marwa & Aziakpono, 2015).

In November 2008, the Kenyan parliament enacted the country's first Sacco-specific Act. The legislation gives the latest frameworks for Sacco soundness and safety plus how they are supposed to provide their services which allow them to have a fair platform to compete with the country's commercial banks (Marwa & Aziakpono, 2015).Sacco Societies Regulatory Authority (SASRA)is a public corporation guided by Sacco Societies Act (Cap 490B) of Kenya Laws. The Act was fully implemented from 18th June 2010.

Deposits taking SACCOs have continued to expand their physical presence and operations to various parts of the country, with a total of 464 physical branches spread

out in different parts of the country being recorded in 2017. Further to head office locations which are channels of delivery, DT-SACCOs account for almost 638 physical financial delivery channels spread across the country. Even though there is evidentially high concentration of these physical branches in about a third of all the counties, it is noteworthy that the branch networks of SACCOs are generally situated in small market and trading centers, in which they are the only known formal financial institution, thereby heavily deepening the availability of financial services to the Kenyan populace.

1.2 Statement of the Problem

Different Saccos process and apply their strategic resources of finance, human capital, technology and physical assets with different levels of success and with varying outcomes on their performance. How each of these resources is processed and harnessed by individual Saccos would have a definite impact on its performance. The entrepreneurial decision to create and manage such resources is a complex process that is subject to interaction of human capital and financial resources coupled with availability of technological capabilities to manipulate these resources so as to positively influence Sacco performance. In an ideal situation where these factors are efficiently and effectively managed, performance would be significantly improved.

Despite their importance in the national economy DT SACCOs in Kenya are characterized by unsatisfactory member service delivery and poor performance, leading to collapse, closure and restriction (Mathuva, Muthuma & Kiweu, 2016). In the year 2017, two DT-SACCOs had their licenses revoked and 12 DT-SACCOs were operating on conditionally restricted half-year licenses for failing to meet their financial obligations. In addition, even though total income in SACCOS had been increasing for the past five year, non-performing loans had been on the increase, having increased from5.23% in 2016 to 6.14% in the year 2017, (SASRA, 2018).

Various studies have been done on organizational strategic resources and firm performance in Kenya. For instance, Njagi (2018) examined the effect of strategic

resources on performance of public health sector in Embu County and found that financial resources, technological and physical resources allocation have significant effect on performance. Kogo and Kimencu (2018) examined the effect of organizational capabilities on performance of insurance industry in Nairobi City County and found that technological, marketing, product and human resource capabilities have significant effect on performance of insurance industry. However, these studies were limited to public institutions and hence their findings are not generalizable to SACCO societies. Further, Njagi (2018) used a positivism research design and a descriptive research design, while Kogo and Kimencu (2018) adopted a descriptive research design. However, the current study used a descriptive explanatory research design and a pragmatic research approach.

Karagu and Okibo (2014) investigated financial factors influencing performance of Saccos in Kenya. They found strong relationship between financial investment decisions, member withdraws and servicing of loans, on one side, and performance of Saccos, on the other. The study examined Saccos in general and used descriptive research design. The study dwelt only on the effect of finance on Sacco performance.

From the foregoing it is evident that there are both contextual and methodological gaps in most of the past studies reviewed above. None of them had examined the four strategic resources together and their effect on performance of DT Sacco on a broad scale as undertaken in this study. Similarly most have used only descriptive research approach. The current study sought to address these conceptual and methodological gaps by adopting a broader approach both in context and research design approach. Moreover none of the foregoing studies have attempted to study the moderating impact of firm size on the effect of strategic resources on Sacco performance.

1.3 Objectives of the Study

This section covered the objectives of the study including the general objective and specific objectives

1.3.1 General Objective

The general objective of the study was to examine the effect of organizational strategic resources on the performance of Deposit taking SACCOs in Kenya

1.3.2 Specific Objectives

The specific objectives of this study were:

1. To assess the effect of financial resources on the performance of deposit taking SACCOs in Kenya
2. To determine the effect of human capital on the performance of deposit taking SACCOs in Kenya
3. To establish the effect of technological resources on the performance of deposit taking SACCOs in Kenya
4. To examine the effect of physical resources on the performance of deposit taking SACCOs in Kenya
5. To evaluate the moderating effect of firm size on the relationship between organizational strategic resources and the performance deposit taking SACCOs in Kenya

1.4 Research Hypotheses

The following are the null hypotheses that were tested in this study:

$H_0$1: Financial resources have no significant effect on the performance of deposit taking SACCOs in Kenya

$H_0$2: Human capital has no significant effect on the performance of deposit taking SACCOs in Kenya

$H_0$3: Technological resources have no significant effect on the performance of deposit taking SACCOs in Kenya

$H_0$4: Physical resources have no significant effect on the performance of deposit taking SACCOs in Kenya

$H_0$5: Firm size has no significant moderating effect on the relationship between organizational strategic resources and the performance of deposit taking SACCOs in Kenya.

1.5 Significance of the Study

This research study's findings may benefit the management of deposit taking SACCOs in Kenya, the Kenyan government, academicians, scholars, researchers and policy makers, SASRA, shareholders and other stakeholders.

1.5.1 Government of Kenya and other Policy Makers

SACCOs in Kenya are a key contributor to the national economy by acting as financial intermediaries through savings, loans and assets. As such, their performance is of great importance to the national and county governments of Kenya and policy makers. Therefore, the policymakers may gain from this research since it will give data on how organizational strategic resources affect performance of deposit taking SACCOs. This information can be used in formulating policies on best approaches towards improving performance of deposit taking SACCOs in the country. In addition, the findings of this research can be used as a basis on which policies are formulated to safeguard deposit taking SACCOs' members and other investors.

1.5.2 Academicians and Researchers

This research contributes to knowledge in strategic management on the effect of organizational strategic resources on performance of deposit taking SACCOs. The study

specifically provides better understanding on how financial resources, human capital, technological capacity and physical assets affect performance. For researchers and academicians, the study provides further knowledge and insight which can be used as research material and literature review in related studies. Further, limitations of the study will emerge as areas of further research on organization strategic resources and organizational performance.

1.5.3 Management of Deposit Taking SACCOs

To the management of SACCOs, the study provides data on how organizational strategic resources affect organizational performance. The results can be used to improve or develop new strategies based on financial resources, human capital, technological capacity and physical assets to improve performance. The study also provides recommendations on how the management of deposit taking SACCOs can leverage on strategic resources to improve performance.

1.5.4 Shareholders

Shareholders and other stakeholders in deposit taking SACCOs in Kenya will benefit as the study provides information on how organizational strategic resources affect organizational performance. This can be used to make informed investment decisions. Shareholders can use information on financial resource, human capital, technological resource and physical resources possessed by respective SACCOS to make informed decisions on which SACCOs they can profitably invest in.

1.5.5 Sacco Societies Regulatory Authority

Sacco Societies Regulatory Authority may gain from the research findings as it may obtain recommendation and information regarding organizational strategic resources (financial resource, human capital, technological resource and physical resource) and their effect on the deposit taking SACCOs in Kenya. These recommendations and

information may be used to formulate regulations regarding different resource configuration among SACCOs in an effort to improve their performance.

1.6 Scope of the Study

The study focused on four components of organizational strategic resources: financial resources, human capital, technological resources, and physical assets; and firm size as the moderating variable. These four components were selected because they are regarded as the most critical strategic resources in a firm. According to Ferreira and Fernandes (2017), strategic resources in an organization include financial capacity, human resource, physical assets and technological capacity. Deposit-Taking SACCOs were selected in this study as they are currently a major player in the national economy by acting as financial intermediaries for the less banked and providing employment. In addition, the study only focused on deposit taking SACCOs in five Counties in Kenya: Kiambu County, Meru County, Mombasa County, Nairobi City County and Nyeri County. The five counties were selected as they had the highest concentration of deposit taking SACCOs in the country accounting for more than 50% all registered D.T SACCOs in the country. The target population of the study was 354 financial, human resource, ICT and property managers/chief accountants in 84 Deposit-Taking SACCOS in the five Counties in Kenya. This study was conducted between November 2018 and June 2019.

1.7 Limitations of the Study

The study's limitations are those aspects of its design or methodology that affect or influence how the research's findings are interpreted. One of the study's shortcomings was that the administration of Kenyan deposit-taking SACCOs was hesitant to offer approval for data collecting. Nonetheless, the researcher provided them with data collection letter from Jomo Kenyatta University of Agriculture and Technology to assure them that the research was for academic purpose only. Moreover, some participants did not want to fill the questionnaires for fear of victimization by the management.

However, the researcher assured the respondents that any information that they would provide during the study would be handled with utmost confidentiality. In addition, every respondent was advised not to write his or her name in the questionnaire so as to enhance anonymity. Further, the researcher obtained a research permit from NACOSTI to assure the participants that the intent of the research was for academic purpose. Another limitation was that some participants failed to fill their questionnaires due to time constraints. Nonetheless, the researcher used a drop/off and pick/up later method so as allow participants who would be occupied to allow for their free time to respond to the questions. Furthermore, the researcher gave the participants an ample period of up to two weeks for them to fill the questionnaire thereafter the questionnaires were collected.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the existing literature on the role of organizational strategic resources on performance of deposit taking SACCOs. The chapter starts with a theoretical review that covers theories related to the variables in the study. This is followed by a conceptual framework showing the hypothesized relationships between variables. The chapter also encompasses empirical review as per the study objectives, critique of existing literature, research gaps and summary of the literature.

2.2 Theoretical Review

A theory is a group of concepts and ideas used in the explanation of events and other things, particularly the ones based on general principles independent of the event being explained. The theoretical review gives an introduction of the theories that are used to express the reason for the existence of the research. In addition, a theoretical review provides the main variables that affect the phenomenon under study and points out the need to consider the effect of these variables under different circumstances (Swanson, 2013). This study was anchored on five theories: Pecking Order Theory, Human Capital Theory, Unified Theory of Acceptance and Use of Technology Theory, Resource Based View Theory and Theory of Economies of Scale.

2.2.1 Pecking Order Theory

This theory was developed in 1984 by Myers and Majluf. The theory indicates that the cost of financing in a firm increases with the increase in asymmetric information (Yousaf & Iftikhar, 2018). Where information is freely available and shared, informed and balanced decisions are likely to be reached. The three main sources of financing include internal funds, equity and debt. Firms normally give priority to their financing

sources by first preferring the use of internal funds, followed by debt and make use of equity as the last option. Therefore, organizations start by using internal funds and when these funds are completely exhausted they issue debt. When it becomes no longer reasonable and practical to use debt, firms issue equity (Mukherjee & Mahakud, 2012).

The pecking order theory indicates that firms observe and follow the financing sources' hierarchy and prefer to utilize internal funds when they are available. However, when internal funds are not enough, debt is preferred over equity (Amoah-Mensah, 2013). This is because equity would lead to issuance of shares, which subsequently means that there is an introduction of new external ownership in the firm. However, the decision to borrow (debt) is a signal that the company requires external financing (Bhama, Jain & Yadav, 2018).

Many profitable organizations will choose to not borrow because of the inverse relationship that exist between profitability and the debt ratio, in such cases organizations would rather seek internal sources of finance and the dividend payout rate is reached at in regard to the available opportunities for investment while at the same time ensuring there is little change to the dividends. Dividend policies that are stingy combined with uncertainties when it comes to investments and opportunities are an indicator that the financial resources from internal sources are less or slightly more than the expenditures (Andersén, 2011). In case the internal cash flows are more, then the organization will pay its creditors or buy securities. In case the cash flows are not enough then the organization will use the cash available and rather than reduce operations will sell off marketable securities for extra cash flows (Eldomiaty, Azzam & Mohamed, 2017).

The pecking order theory supports debt financing in the financial structure of an organization. The model prefers the use of internal financing rather than eternal financing and the model also encourages the use of debt financing rather than other forms of external financing sources (Mukherjee & Mahakud, 2012). According to this theory debt is the cheapest source of external financing and the most preferred option

compared to other external options. It regards the measures of investment ability as the market-to-book ratio. According to the theory, in times of high investments the leverage will push towards external debts.

The pecking order theory was used in this study to explain the effect of financial resources on performance of SACCOs. According to this model, managers are more likely to seek internal rather than external sources of financing. All SACCOs mainly use two sources of financing: members' deposits and debt (Bamel & Bamel, 2018). The use of these two sources, in one way or another, influences adequacy of funds and timely release of finances, which affects organizational performance. In addition, the provision of other resources in SACCOs including physical resources, human resource and technological resource depends on the availability, timely release and allocation of financial resources.

2.2.2 Human Capital Theory

The theory of the Human Capital was developed in 1962 by Becker and it was later collaborated by Jacob Mincer and Theodore Schultz (Bartocho, 2016). Becker developed the theory so as to indicate the effect of general training on the performance of employees, and overall setting of skills. Specified training competencies enhance the staff skills at their current area of work (Meichang, Wenzhong & Dan, 2017). This theory is made up of three key elements namely advancement opportunities, conducive working environment and training investment. Becker also acknowledged how specific as well as general training affects the burn out level of staffs in their respective organizations. Moreover, the proponents of the human capital theory tend to indicate that there is a direct association between labor cost and profitability of the organization (Bustinza, Vendrell-Herrero & Parry, 2016).

The theory outlines that employees tend to enhance their skills and knowledge and productivity by investing regularly in training, education as well as adoption of other competencies. Becker stipulated that investment in human capital is advantageous to any

organization in that it enhance staff knowledge, health and skills (Chigozie & Onyia, 2018). Becker used the tenets of human capital to indicate that various organizations may generate substantial benefits through adopting the use of the theory. With regard to Coff and Raffiee (2015), Theodore developed the theory with the aim of outlining the importance of management leaders of a particular organization to invest in education, job creation opportunities and ethical practices. Moreover, Schulz expanded the tenets of the theory so as to include the significance of investing on human capital (education as well as training) as more effective compared to physical capital. The proponents of this theory aver that education and training will improve the productivity of workers. In addition, Holden and Biddle (2017), who are also proponents of the human capital theory, indicate that education and training investment results to high returns and low risks than those provided by financial and physical capital.

In relation to this study, the theory tends to give explanation on the effect of the human capital on performance of the SACCOs. As a vital resource, human capital basically represents the knowledge and individual capability as well as skills of the staff in the SACCOs. Human capital tends to leverage on employees' level of education, experience as well as specific competencies (Chuang, Liu & Chen, 2015). The concept of human capital is of significance to this study in that it offers tactical knowledge which the SACCOs may adopt in order to improve on efficient and effective service delivery. Since explicit knowledge is vital for competitive advantage of a particular organization, tactical competencies tend to vary among individuals within an institution and in case of its availability it can positively contribute to competitive advantages.

2.2.3 Unified Theory of Acceptance and Use of Technology (UTAUT)

The UTAUT theory was developed through the seminal work of Venkatesh *et al.* (2003). It is a unified model developed from eight acceptance technology models. The rapid development of technology led to the development of the new model (Venkatesh & Davies, 2000). The UTAUT model sought to showcase technological acceptance and utilization as observed in some contexts like in consumer technologies. Later, UTAUT 2

was developed as an improvement of the original UTAUT. UTAUT 2 identities seven factors that influence behavior namely use and intention of technology; performance expectancy; facilitating conditions, habit; price value, hedonic motivation, social influence, and effort expectancy (Colbert, 2014). The UTAUT 2 was used in this study because it is the most recent and it was developed as improvement of UTAUT 1.

Behavioral intention is a person's intention to act in a certain way which can be used to predict other behaviors especially when the person's actions are voluntary. Additionally, behavioral intention is the probability of performing an act and the cause of a given usage behavior (Demba, 2013). It is therefore true to say intentions are the motivational influencers of behavior towards adoption of technology. They show the effort individuals are willing to put in to act in a given behavior. Further behavioral intention was found to be the key factor that affected the use of mobile services by the individual. Usage intentions were found to be the best indicators of future usage of the services (Venkatesh, Thong & Xu, 2012).

Performance expectancy highlights the level to which individuals expect a certain technology to provide service (Feng & Pan, 2019). Effort expectancy is the usage simplicity of a technology. Social influence focuses on individual perception on utilization of a particular information system. It reflects the social approval from use of that technology. Facilitating conditions refer to the perception that organizational and technical infrastructure gives the needed support to ensure successful usage of the technology. Hedonic motivation is the fun or pleasure derived from using a technology (Gumusoglu & Akay, 2017).

UTAUT theory was used in this study to explain the importance of technological resource on organizational performance. In regard to Performance Expectancy technology improves efficiency in service delivery and cost reduction in SACCOs. In addition, it increases customer satisfaction as they can deposit monthly contributions and deposit money in their accounts at their conveniences (Ferreira & Fernandes, 2017). Regarding Effort Expectancy, training is a key factor to enhance ease of using

technology among staff. This can be determined by technological capability in an institution. In relation to social influence, every other SACCO, microfinance and bank has adopted information technology in service delivery. This influences its adoption by other SACCOs. In relation to facilitating conditions, ICT infrastructure have in the last one decade improved in Kenya, with key players in the sector including Safaricom, Orange, Jamii Telecom, Access Kenya among others competing for service delivery to financial institutions including SACCOs. In relation to hedonic motivation, the use of information technology is considered to be fun among young people thus increasing adoption and usage in Saccos.

2.2.4 Resource Based Theory

This theory was developed by Birger Wernerfelt in 1984. The resource-based view (RBV) as the key theory explaining the competitive advantage in a firm, notes that an organization can only achieve competitive advantage by use of the available resources and capabilities in the firm. Colbert (2014) emphasizes that the difference between resources and capabilities is that capabilities are a special form of resources that are part of the firm, they are also non transferrable and specific to an organization. The aim of these resources is the improvement of other resources that belong to the organization. While resources are the assets and items owned by an organization, capabilities are the ability of the organization to use these resources. Capabilities exist from the building of the firm's resources. The success of a firm will depend on its resources. If the resources available are relevant to its operations and strategy then the firm is likely to succeed (Furrer, Sudharshan & Alexandre, 2016). In the RBV, the firm is defined in terms of the resources and knowledge it has. It is a means of adding an appreciation of the role of the firm to our understanding of the market (Rashidirad, Soltani & Salimian, 2015).

The proponents of this theory argue that it is only those valuable resources that are able to provide a firm with a sustainable competitive advantage. RBV emphasis is on the internal factors that can be controlled by the firm rather than the hard to control external factors (Ruivo, Oliveira & Neto, 2015). The firm's capabilities and resources are the

basis upon which a firm strategy is built. An organization's competitive position is defined by its unique relationships and resources. Organizations are not the same as they possess distinct unique resources, capabilities and assets to utilize.

This study used the resource based view theory to explain the effect of physical resources on organizational performance. In SACCOs, physical or tangible assets are resources that are used by the organization in a valuable manner to give the firm revenue (Gumusoglu & Akay, 2017). Such assets can be either fixed or current. Current assets are inventory, cash, and marketable securities among others. These are assets that are easy to sell and can be useful when there is a shortage of cash as they can be sold to get cash (Gaotlhobogwe, 2017). Fixed assets are assets that are not current in that they are used for more than a year to ensure the success of the firm operations. On the balance sheet they may include property and equipment. They are made up of machinery, buildings, and office furniture. SACCOs own physical resources such as buildings, land, office furniture, motor vehicles as well as computers and printers.

2.2.5 Theory of Economies of Scale

Marshall developed this theory in 1980. This theory tries to explain competition and increasing returns. Marshall tried to come up with an explanation for the relationship between increased outputs and reduced costs. The theory put into consideration the influence of the internal and external factors on upcoming organizations (Chandra & Sandilands, 2016). The cost per unit of each output reduces as there is more spread of fixed costs due to increased units of outputs. The efficiency in operations also improves as the output scales go higher which results to lower variable costs (Elder-Vass, 2018).

Economies of scale are evident in different businesses and organizations and can be achieved at distinct levels including manufacturing, production or on the whole business operations (Keah, 2016). For example, it is acceptable to imagine that in a large manufacturing plant cost per unit will be lower compared to the same cost per unit in a smaller manufacturing organization, all other factors held constant. Additionally, an

organization that has many branches and facilities should have a lower cost per unit compared to a rival with fewer facilities (Whitaker, 2011).

The model helps to explain the moderating effect of firm size to the relationship between organizational strategic resources and performance. A large firm with large plants producing high volumes will tent to enjoy economies of scale. Economies of scale can be aggregative, internal, international, national or dis-aggregative and enable a firm achieve a competitive advantage because of the scale and size of the operations (Kharazmi & Teymouri, 2013). Large organizations are likely to perform better due to the ability to conduct research, market power, aggregation of service delivery and the operational processes (Gumusoglu & Akay, 2017). It is possible for such organizations to spread their costs over the different facilities and outlets. The theory of economies of scale gives an explanation of the cost advantages accrued to organizations because of their output, operation scale and size. This study used the Theory of Economies of scale to demonstrate that large deposit taking SACCOs are likely to realize lower cost of service delivery per customer or even deliver higher returns to their members and shareholders. Large Saccos as compared to much smaller ones are likely to have stronger financial resources, and therefore be able to employ more skilled and better qualified staff. They are also able to leverage on the latest technology for their operations and to provide cost effective and efficient to their customers. Large Saccos will also be able to provide greater branch network and even more convenient physical facilities to their staff and members.

2.3 Conceptual Framework

A conceptual framework is a model of presentations where a researcher conceptualizes or presents the relationships between variables in a study (Swanson, 2013). A conceptual framework provides knowledge that is relevant and important to the study's problem statement and research questions. This study sought to examine the effect of organizational strategic resources on the performance of deposit-taking Savings and Credit Cooperative Societies. The independent variables were financial resource, human

capital, technological resource and physical resource (Gaotlhobogwe, 2017). The dependent variable was the performance. The moderating variable was firm size.

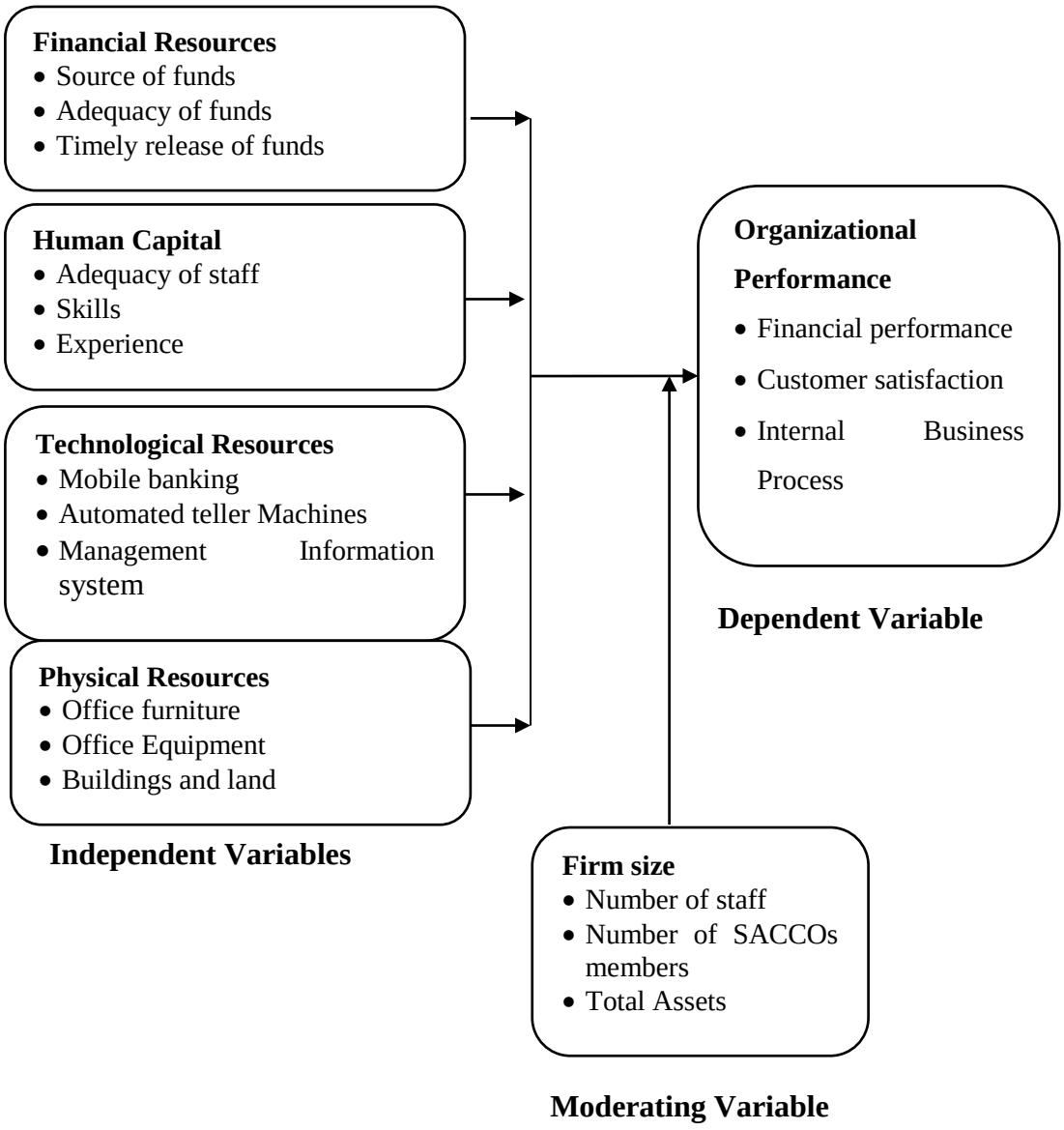

Figure 2.1: Conceptual Framework

2.3.1 Organizational Performance

The performance of an organization is affected by its operations' effectiveness and efficiency (Li, Zhou & Tian, 2018). Effectiveness is the achievement of results that relate to the objectives of the customer needs. On the other hand, efficiency is the use of organization resources in an economic manner to achieve a business goal or objective. Efficiency and effectiveness form the basis on which a firm chooses to pursue a given strategy. Effectiveness leads to focus on strategies that satisfy customer's needs while efficiency leads to strategies whose focus is on the internal processes and operations. Financial and non-financial methods can be used to quantify efficiency and effectiveness (Bakri, 2017). Financial and non-financial measures include delivery of services, customer's satisfaction, efficiency, learning and innovation, market share, flexibility, quality of products, introduction of new products and responsiveness.

This study will use Balanced Scorecard model of performance measurement (Amoah-Mensah, 2013) as it is broad enough to include quantitative and non-quantitative parameters. Specific measures included financial performance, internal businesses processes, learning and growth and customer satisfaction. Kaplan and Norton (2004) explain that the business strategies as well as its objectives, target initiatives and measures flow from the critical success factors. The perspectives of performance include financial performance, internal business processes, customers' satisfaction and learning and growth. Financial performance perspective is measured using revenue, market share, assets and cost leadership (Kogo & Kimencu, 2018). Customer satisfaction perspective is measured using quality, speedy purchase and appropriate selection. Internal business processes perspective is measured using process innovation, efficiency, relationships, and convenience. Learning and growth perspective is measured in terms of competencies, operational excellence and climate of action.

Different authors in Kenya have examined the performance of SACCO's using different measures. For instance, Muriuki (2016) in a study on the factors Affecting Sacco Performance in Meru South District measured performance in terms of dividend,

profitability, total assets and liquidity. Karagu and Okibo (2014) examined financial factors influencing performance of SACCOs in Kenya and examined performance using number of members, total assets, customer satisfaction, dividends and profitability.

2.3.2 Financial Resources

Financial resources help to fund the strategies of the enterprise and also fund the expansion of the operations of the firm (Maithya, 2016). This notion agrees with research that has been done previously showing that there is need for an organization to have enough financial resources if its operations are to be sustainable and successful (Fonseka, Tian & Li, 2014). For the firm to get the best return, financial resources should be used in priority investments that are able to enhance the firm performance

Financial resources are scarce, basic and valuable resources that are often used to get other resources including buying advertising space, purchasing equipment and paying staff (Marr, 2005). Money is obviously critical in government programs because money is necessary for the hiring of the staff and for conducting the technical analyses and the monitoring of compliance (Kharazmi & Teymouri, 2013). Also, adequate funding is a necessity to provide an organization with the ability to run their administrative and technical operations successfully to enable the firm meet its objectives.

Provision of financial resources at the right time is paramount for the organizational success. This is corroborated by the findings of Abdulrahman and Bamiduro (2018) who found that, accessibility to sources that can be relied upon to provide the needed financial resources and the capability to generate good returns on these funds is a factor that determines if the firm will get external funds from its stakeholders which in the end can enhance the firms performance. This is in agreement with findings from Adomako and Danso (2014), who found that availability, accessibility and adequacy of funds give an organization competitive advantage in service delivery. Funds are critical in acquisition of the necessary physical resources like furniture and equipment. Although availability of funds is critical in attainment of organizational goals, adequacy of such

funds is equally important because it facilitates timely procurement of the necessary inputs (Makanga, 2017).

Misuse or lack of adequate financial resources can negatively impact the performance or availability of human resources, physical assets and processes. Availability of financial resources indicate that, the firm is able to invest in unique, valuable and difficult to imitate capabilities (Ali & Chaudhry, 2013). As a result, it can gain competitive advantage. A firm with limited or without financial resources will find it difficult to cater for its obligations. Finance acts as the fuel that runs a business organization (Bagire & Namada, 2013). A firm can use different sources to access finance, and more than one option can be used. The source used will depend on the firm's willingness to incur debt, the level of solvency at the time of starting the business and the needed amount of cash for developing and maintain projects (Andersén, 2011). An organization operating with adequate funds is in a better position to cover its obligations hence minimizing the possibilities of financial insolvency that can result and lead to legal problems, liquidation of assets and potential bankruptcy.

2.3.3 Human Capital

Human capital refers to employment, education and industrial experiences possessed by employees and other experiences that allow the business owners deal with the challenges of a dynamic business environment. If there are gaps or unavailability of human capital resources then the business can face challenges when it tries to develop, launch new products, hire workers or even to grow. Nyabuti, Chepkilot and Zakayo (2016) point out that human resources can be referred to as the available personnel in the firm and their capabilities which will be used to successfully implement strategy.

If the firm is to successfully meet its objectives, then it needs to have human resources that are proficient in their tasks and internal systems that are efficient (Meichang, Wenzhong & Dan, 2017). A firm should not expect to meet its operations if it does not have talented and efficient employees. These employees should also be skilled and have

the needed intellect to get the work done. Yen (2013) emphasizes that important strategic proposals should be tasked to the senior managers who have the needed talent and skills to execute the proposed tasks and also because they are reliable and are trusted to come up with the right decisions and actions.

Organizations with more qualified and stable workforces experience greater future profit as compared to firms with less stable and less qualified workforce. The combination or composition of human capital is also a great determinant of future performance (Alnachef & Alhajjar, 2017). The skill set of a staff creates an understanding of work responsibilities and an effective and efficient way of performing daily activities. Employees with proper skills and experience, have a better understanding of their jobs and what is expected of them. For an employee to be effective he/she must have a broad skill set that extends to the knowledge of corporate safety procedures (Bakri, 2017). Firm performance is positively affected by relevant employee experience as well as management experience. Employers usually prioritize experienced candidates to fill the vacancies in their firm (Black & Boal, 2012). This enables organizations to save on time, money and resources. It also improves organization performance since experienced workers ensure increased output.

2.3.4 Technological Resources

Technology is necessary for both private and private firms as it allows organizations to meet the needs of their clients fast and effectively. Ali and Chaudhry (2013) noted that firms should share knowledge among each other if they want to effectively respond to environmental threats. The efficiency of operations in a SACCO is subject to proper matching of the available information technology and the SACCO functions. Yen (2013) indicate that information technology alignment such as information technology compatibility; information technology flexibility and network connectivity improve firm performance in volatile markets. In addition, information technology is a paramount source of value for firms and it allows for improved performance (Moturi & Mbiwa, 2015).

Preko (2014) indicates that information technology investment favorably affects profitability and improves revenue and performance of the firm because it allows the organization take advantages of opportunities that make it better positioned in the market. In order to constantly meet customers' expectations in the rapidly changing environment, there is need for institutions to keep abreast with new trends in ICT. For instance, Chigozi and Onyia (2018) established that, the use of ICT improved communication among customers and staff in an organization.

Mobile technology has greatly simplified the ordinary organization operations by use of mobile banking. This has been achieved through provision of easy access to company accounts using even smart phones to connect with the business (Ezeugbor & Okorji, 2014). The technology has improved the speed of payment of bills, real time transactions, accessibility, consistency, security, and easy communication. Automated teller machines and mobile banking ensure 24 hour access to banking products/services by bank customers; they are easy to use and are faster than human tellers in the banking halls. Automated machine systems have enabled positive change in banking sector performance through improved efficiency in operations and customer service (Fincham, 2014; García-Sánchez, García-Morales & Martín-Rojas, 2018). Information technology plays an essential role, especially in service industry such as the banking sector, where they build their competitive advantage on systems credibility and reliable information (Karagu & Okibo, 2014).

2.3.5 Physical Resources

Physical resources that provide economies of scale to the organization can be a source of value. However such resources can only be a source of value if they are adequate. Brackertz (2016) agree that physical resources comprise of equipment and buildings among other resources that are used to create goods and services. However, physical resources do not meet the requirements of sustainable competitive advantage that include non-substitutability, rarity, and inimitability and therefore do not necessarily improve organizational performance (Akomolafe & Adesua, 2016).

Nonetheless, having of physical resources by a firm does not mean that the performance of the organization will improve. However if there are skilled human capital that can effectively use and service these resources then there is the possibility of the firm performance improving (Muketi, 2019). Njagi (2018) notes that adequacy, quality, capacity and the maintenance of SACCO physical resources are important aspects that can improve the performance of the SACCOs.

Physical capital intensity looks at a firm's physical resources that are part of those used in logistics and delivery of services. The efficiency of using such resources can lead to decreased costs which lead to improved performance (Niresh & Velnampy, 2014). Physical resources comprise of material assets owned and managed by a firm, including buildings, office furniture, manufacturing equipment and materials**.** Shortage of physical resources leads to low production capacity in a firm and influences its cost position which in turn impacts the firm's performance (Brackertz, 2016). Critical decisions are needed for proper usage of physical resources. These decisions include facility size, facility location, technological advancement, the alternatives to land and buildings usage, reserves and raw materials reorder levels. The means of getting new facilities and materials also contribute a lot to the important aspect of decision making and management (Ramli & Rosmaizura, 2018).

In any firm, office furniture is an essential requirement for it enables staff to work comfortably. Employees might find it hard to work in a firm without proper office furniture (Akomolafe & Adesua, 2016). Modern office equipment, such as copiers, computers, scanners and fax-machine, have now become common in firms around the world.

2.3.6 Firm Size

The firm size is characterized by its production capacity and the amount of services or products it can produce to meets its customer's needs (Bartocho, 2016). Economies of scale allow a firm to grow in terms of size. Economies of scale result when outputs

increase at a higher rate than that of inputs. The size of an organization is a contingent factor that is categorized among the traits of a firm. According to Pervan and Visic (2013), a better show of ‘‘bigness’’ is the management size. Most of the times, the size of a firm is quantified using number of workers, sales turnover or the value of the firm’s assets. The size of a SACCO can be quantified using its members, branches, and deposits (Njagi, 2018). Some scholars argue that the size of an organization can influence its sustainability (Dogan, 2013; Niresh & Velnampy, 2014). This view is supported by the notion that large organizations are more able to sustain their operations. Such firms have more resources at their disposal and resource-slack. Such benefits allow such firms to use better strategies to ensure sustainable operations (Obinga, 2014).

Another argument is that large organizations’ relative costs are much lower compared to smaller organizations. Economies of scale that characterize larger firms operations allow them to be sustainable. In addition, Olawale, Ilo and Fatai (2017) note that because of differentiation, decentralization and specialization large organizations have more skilled and specialized employees, better performing administrative processes and much better internal systems that help them deal better with business challenges. Firm size has therefore moderating effect on the strategic resources such as financial human capital, physical assets and even the degree of sophistication and availability of technology.

Uncontrolled Increase in firm size however negatively affects the marginal utility of additional sustainability reporting (Olawale, Ilo & Fatai, 2017). Organizations that are very big are powerful and are able to resist pressures from external sources and thus they may not be too socially responsive (Abiodun, 2013). Further, such firms have the resources they require and are not likely to feel the need to report on their performance.

Since they have a bigger market share, established firms have more profit opportunities. Large firms are likely to use their size muscle to acquire smaller ones even to influence regulators. They also tend to command respect from their suppliers. This situation grants them the chance to operate in more profitable sectors with minimum competition (Pervan & Visic. 2013). On the other hand, small sized businesses face challenges in

raising capital, high overheads and also face challenge in marketing their product (Niresh & Velnampy, 2014).

2.4 Empirical Review

This section presents an empirical review of literature in line with the research objectives. It covers the effect of financial resources, human capital, technological resources, physical resources and the moderating influence of firm size on organizational performance.

2.4.1 Financial Resources and Organizational Performance

Fonseka, Tian and Li (2014) examined the impact of financial capability on firms' competitiveness and sustainability in highly regulated Chinese market. The study used a balanced panel made of 4,530 yearly observations. The model of research was examined using hierarchical regression. The findings of the study was that the regulations that had been put up by the Chinese government although strict made it possible for some organization to easily access capital and external financing compared to other firms. It was also deduced that the internal financing capabilities for an organization did not offer any notable advantages compared to the external financing capabilities. The ease of access of bank funding to a firm favorably affected the competitiveness of the organization in the market. It was also evident that organizations that offered shares to their shareholders, those that provided bonds to their customers and those that could easily access bank financing were more likely to have sustainable business operations (Fonseka, Tian & Li, 2014).

In Iran, Kharazmi and Teymouri (2013) examined the effects of financial management practices and their role in organizational performance. The study used a critical review of literature and the findings indicated that financial management practices ensuring adequately and timely release of funds have a positive effect on economic development and organizational performance. Akhavana and Eslamifara (2015) examined the effect

of financial resource allocation on dynamics of national innovation system in Pakistan. The study adopted a survey research design and found that financial and economic instruments were a source of incentives or disincentives and gave support to given social and economic operations.

Abdulrahman and Bamiduro (2018) studied the relationship between financial resource allocation and organizational effectiveness in colleges of legal and Islamic studies in Nigeria. Among the 12 legal and Islamic colleges in the northern part of the country 8 were chosen using purposive sampling method. The study used a descriptive research design. Further, out of the 535 staff members of the institutions 450 were chosen using random sampling method. The findings revealed that capital expenditure, recurrent expenditure and revenue from internal sources had an effect on organizational effectiveness.

In Ghana, Adomako and Danso (2014) studied the relationship between financial literacy and firm performance and the moderating role of financial capital availability and resource flexibility. The researchers used OLS and a survey to look at 298 Ghanaian entrepreneurial organizations. According to the findings, financial literacy favorably affects the performance of organizations especially if the business owners can easily access funds and if they have flexible resources at their disposal.

Njagi (2018) studied the effect of financial resources on performance of public health institutions in Embu County. This research used a cross sectional study method using a population of 560 respondents who comprised of 550 employees and 10 outpatients drawn from the five public health facilities in Embu County. The measures of financial resource included ease of access to funds, adequate or inadequate funds, and timeliness of the provision of financial resource, effective fund allocation and collaboration. The study revealed that there was a positive contribution of financial resources to performance of public health institutions.

Demba (2013) examined the effects of financial management practices on performance of Kenya Medical Training College. This study was conducted through the use of a descriptive design. 201 finance staff of KMTC was the study population from which 60 were selected using stratified random sampling. The results revealed that the yearly budget influenced the Kenya Medical Training College performance as it minimized costs, allocated the college resources, budget inflexibility and budget accuracy. The study found that financial reporting and tracking was the factor that greatly affected the KMTC performance. Annual budget process was the next factor and the last one that affected KMTC performance was the internal control levels.

White, Maru and Boit (2015) studied financial resource as drivers of performance in small and micro enterprises in service retail sector in Eldoret Municipality, Uasin Gishu Country for this study explanatory research method was used. The target population was made up of 1200 SMEs in the Eldoret municipal council and from these, 600 SMEs from the service sector were used as the study's sample. The study found out financial resource had a significant correlation with firm performance. The study concluded that capital and financial resources were essential in ensuring that the SMEs performed effectively

Awando and Rukangu (2015) researched on the relationship between financial resources and implementation of strategic plan in the ministry of land in Meru County, Kenya. The researchers used descriptive research method. The targeted audience was all staff working in the ministry of land in Meru County. The study established that there was significant relationship between financial resources and implementation of strategic plan in the ministry.

2.4.2 Human Capital and Organizational Performance

The main source of sustainable competitive advantage in an organization is human resource (HR) (Nyabuti, Chepkilot & Zakayo, 2016). Coming up with HR capabilities is characterized by developing knowledge for the organizations human resource. The effect

of empowering human resource in organization performance and its influence in the development of organization strategies is becoming more obvious in the larger firms and even on SMEs. Today when it comes to HRM the debate is on the link between human resource capabilities and performance of the organization (Yen, 2013).

Shady (2011) studied the effect of human capital and organizational characteristics on the business value of information technology. The study used data provided by Statistics Canada in a 2005 survey where a large number of Canadian organizations were surveyed. According to the findings human capital affects the business value of information technology. Ali and Chaudhry (2013) examined the effect of Human Capital on Organization Performance in the service sector of Punjab, Pakistan. The data for the study was derived from five Pakistan cities found in Punjab. Organization performance was measured through different indicators like job satisfaction, life satisfaction and career satisfaction. The results revealed that human capital management influences satisfaction, job and career of staff members which are factors that affect the performance of an organization.

Yen (2013) studied the impact of bank's human capital on organizational performance in Taiwan. The study which was a case study looked at eight Taiwan commercial banks. The results from the qualitative research found that human capital positively affects innovation. The research also identified human capital elements such as skills, knowledge, abilities and also the leader's open-mindedness, vision, ability, execution, functional diversity and imitation. The findings further showed that there was an incremental observation of innovation among the banks. Further innovation can be the mediating factor between the human resources in the firm and the performance of the firm.

In Ghana, Preko (2014) conducted an assessment of the impact of human capital development on effective work performance at selected departments in Kwame Nkrumah University of Science and Technology. The descriptive research had a sample of 120 employees that were chosen from different College of Arts and Social Sciences

departments. The findings were that the different departments had developed effective systems that allowed for effective communication of the development and training programs. Human resources development was possible due to training, shadowing and mentoring.

In Nigeria, Chigozi and Onyia (2018) examined the effect of human capital on organizational performance in manufacturing industries in South-East Nigeria. The study target populations were South East Nigerian manufacturing firms where the sample size was made up of 6230 employees. According to the results of the survey based study, knowledge positively influenced the quality of products and skills have positive significant relationship on promoting of innovations. The study revealed that any firm that does not invest in learning and does not take continuous development in learning, sharing, mobilization, distribution, cultivation and practicing, reviewing and spreading of knowledge cannot compete well in the dynamic business markets.

Rotich (2016) conducted a study on the effect of human resource capabilities on sustainable organizational competitiveness of mobile phone service providers in Kenya. The study was guided by pragmatism philosophical paradigm with the help of explanatory research design. The results revealed that there was a positive and significant relationship between sustainable competitive advantage of the firm and competency of the firm's human resource.

Maithya (2016) examined the influence of human resource on implementation of strategic change management practices at the University of Nairobi. The research design used was a case study and both primary data and secondary data were collected. Data was analyzed using descriptive and inferential statistics. The study revealed that knowledge is seen as a strategic resource that is not affected by depreciation and can generate increasing returns. The study recommended that the University should continuously train and develop its employees to enable them cope with environmental changes and reduce resistance to change.

2.4.3 Technological Resources and Organizational Performance

García-Sánchez, García-Morales and Martín-Rojas (2018) examined the influence of technological assets on organizational performance through absorptive capacity, organizational innovation and internal labor flexibility. The research sample for this study was made up of 160 technology firms from Europe. According to the results performance of firms was enhanced by the use of technology and improved technology skills and competencies. This is because these factors positively affected the potential of the firm to produce more. Additionally, the flexibility of internal labor affects the performance of the firm since it affects innovation.

In the United States, Bustinza, Vendrell-Herrero and Parry (2016) studied technological capabilities, resilience capabilities and organizational effectiveness. The sample used for the study was 250 manufacturing organizations. The model used in this study was provided and further tested by use of Structural Equation Modeling. The findings revealed that there existed a positive and significant relationship between technological capabilities and organizational effectiveness. Razavi *et al.* (2016) studied the impact of technological innovation capabilities on competitive performance of Iranian ICT firms. The factors influencing competitive performance among firms were tested using Structural equation modeling (SEM). The findings showed that there existed positive relationship between the performance of the organizations and ICT. Additionally, factors such as research and development, allocation of resources and marketing and learning abilities enhanced the innovativeness of the Iranian organizations.

Reichert and Zawislak (2014) examined the relationship between technological capability and firm performance among Brazilian firms. A total of 133 Brazilian firms were analyzed. The findings showed a positive correlation between a firm's performance and technological capability. Further, firms that did not invest in technology or those in the low technology intensity industries performed poorly when it came to economic performance. The research further revealed that there was a strong correlation between the performance of the organization and research and development when normal figures

were used. However the correlation was not found when the figures were changed to match the size of the firms.

Ringim, Dantsoho and Tyoapine (2017) examined the effect of dynamic information technology capabilities (DITCs) on organizational performance of deposits money banks in Nigeria. The sample size for this study was taken from a population of 191 staff from deposit money banks and the sample had a total of 155 staff members. The findings showed a positive and significant relationship between organization performance and DITCs more so in regard to marketing and financial performance. The relationship was found to be more favorable when it came to flexibility of the IT infrastructure, followed by the expertise of the IT staff members, followed by the capability of managing IT and lastly creation of IT knowhow.

Muketi (2019) studied technological resources for sustainable competitive advantage in manufacturing in selected companies in Kenya. Data was collected from the archives, interviews, newspapers and published reports. The operations strategies using the technological resources available by all the three companies were frequently reviewed quarterly, semiannually, annually and followed strategic plans that cover periods of a few years. The technological resources reported to have been in use include: human resource technical skills, specialized tools, facilities, equipment, time, and alternative technological resources, both internal and external. The study found that there was a positive correlation between use of available technological capabilities and performance.

Songoro, Odhiambo and Musiega (2017) examined the effects of financial innovations on financial performance of Kakamega Teachers Co-operative Society Limited. This research used a descriptive research method to deduce the relationship between the variables understudy. The 53 employees of the cooperative society were the sample of the research with the findings showing that innovation in the processes was positively correlated to financial performance. As a consequence of technological innovations such as internet banking and connectivity, ICT, and computer technology, SACCOs are now cutting down on operational costs. Today, the benefits of use of innovativeness to

SACCOs are visible more so in terms of improved efficiency, operations, service delivery among other improvements. Thirdly, SACCOs have partnered with Cooperative bank and have introduced Sacco Link M-banking service.

2.4.4 Physical Resources and Organizational Performance

Brackertz (2016) studied the relationship between physical resource and service performance in local government community facilities in Australia. The study looked at two Melbourne metropolitan councils. The findings showed that there was significant correlation between the physical facility and the services provided. The hypothesis supported was that physical facilities that are good lead to better service delivery.

In Malaysia, Ramli, and Rosmaizura (2018) conducted a study on the effect of physical resources on academic performance of academic institutions in Lahore. The study adopted descriptive research design and found that physical resources have a positive and significant effect on performance of academic institutions. The study also found out that availability of hostels, sports facilities, parking and transportation facilities affected the performance of academic institutions in Lahore. Further, the study established that these factors contributed about 51.5% towards the students' performance.

Akomolafe and Adesua (2016) examined the impact of motivation on performance of secondary schools in Nigeria. Ex-post facto design was used for this research. The senior secondary students in schools in South west side of Nigeria made the study population. A significant positive relationship was deduced between the physical buildings, motivation levels among the students and their performance in academics. The conclusion was that there was need to provide more quality learning materials, physical and human resources to secondary school students to motivate them to do better in their academics.

Njagi (2018) studied the effect of physical resources on performance of public health institutions in Embu County. The research used a cross sectional study design and the target population was 560 respondents who comprised of 550 employees and 10 outpatients drawn from the five public hospitals in Embu County. The measures of physical resource included availability, adequacy, quality and maintenance. The study established that physical resources positively affected the performance of public health institutions.

Bartocho (2016) assessed the effect of physical resource on staffs' performance at G4S firm in Kenya. The researcher used explanatory research approach. Simple random-sampling technique was used to select the study's sample size. The study found that physical resource allocation has significant effect on staffs' performance at G4S. Physical capital resource capabilities such as availability of adequate stocks to service customer needs, own buildings, ICT facilities, availability of electricity power in the offices, dependable fleet of vehicles and customer care facilities will boost employee performance in offering efficient service.

In Kenya, Bakari, Likoko and Ndinyo (2014) conducted a study on the effect of physical resources on performance of public secondary schools in Bungoma County, Kenya. Descriptive research technique was used during the study. The study found that physical facilities have significant effect on performance of public secondary schools. Obinga (2014) examined the relationship between physical resources and internal efficiency of public secondary schools in Tana River County. The researcher used correlation research and descriptive survey methods. The conclusion was that there was a favorable relationship between physical resources and the schools internal efficiency. However, it was also revealed that the schools under study did not have enough physical resources and the few available were in deplorable conditions.

Further, Nturibi (2016) researched on the effect of physical resources on performance of public primary schools in Meru County. The study adopted descriptive research method. The study found that physical resources have a positive and significant effect on

performance of public primary schools. The results also revealed that only one public primary school has a library, and schools have inadequate study materials and this affected academic performance of pupils.

2.4.5 Strategic Resources, Firm Size and Organizational Performance

In Croatia, Pervan and Visic (2013) analyzed the influence of firm size on its business success. The period from which data was obtained was between 2002 and 2010. The findings indicated that that there was a weak positive effect of the size of the organization to its profitability. Niresh and Velnampy (2014) studied the relationship between firm size and profitability among listed manufacturing firms in Sri Lanka. The study data was obtained from 15 firms in the years 2008 and 2011. These firms were active participants in the Colombo Stock Exchange (CSE). The findings deduced that there was no relationship observed between the companies' size and their profitability.

Dogan (2013) conducted a study to examine the effect of firm size on firm profitability in Turkey. About 200 organizations that actively participated in the Istanbul Stock Exchange (ISE) between 2008 and 2011 were provided and used in the study. The findings revealed that there was a favorable relationship between the firm's size and its profitability. Control variables such as the age and leverage rates were found to negatively affect the firms' ROA. However ROA and liquidity had a favorable relationship. Similarly, Sik, Esra and Yener (2017) conducted a study on the effect of firm size on profitability of firms in manufacturing sector during the period of 2005 to 2013. The research adopted dynamic panel data model. The study found out that firm size has significant effect on profitability of firms in manufacturing sector. The results also revealed that staff ratio, firm's sales and its total assets have significant effect on profitability of firms in manufacturing sector. In Sri Lanka, Niresh, and Velnampy (2014) conducted a research on the effect of firm size on financial performance of manufacturing industry. The study used panel data of fifteen manufacturing firms that were active between 2008 and 2012. The results revealed that firm size has no significant effect profitability of listed manufacturing companies in Sri Lanka.

Olawale, Ilo and Fatai (2017) studied the effect of firm size on performance of firms in Nigeria. The panel data was obtained between 2005 and 2013 and was provided by 12 Nigeria non-financial firms. The results showed that the size of the firm indicated in terms of its total assets negatively affected performance. The same size taken in regard of total sales positively affected on the firms performance. Abiodun (2013) studied the effect of firm size on firms' profitability in Nigeria. Again this study used panel data between 2000 and 2009 to deduce the influence of the firm's size on its profitability. The measure of profitability in this case was return on assets. The firm size was shown by both the total assets and total sales. The findings showed that firm size in terms of its total assets and sales positively affected profitability of the Nigerian companies.

Nzioka (2013) investigated the effect of firm size on financial performance of banking industry in Kenya. The 43 Kenyan commercial banks as at the end of 2012 made up the study's population. The panel data was obtained between 1998 and 2012. The three independent variables; total deposits, total loans and total assets were found to have a statistically significant relationship with the ROA of the banks. Total loans and deposits strongly affected the performance of the banks than the other assets. No significant relationship was found between the staff numbers and the financial performance of the Kenyan commercial banks. Further, Karagu (2017) conducted a study to determine the effect of firm size on performance of deposit taking Sacco's Societies in Kenya. The study adopted descriptive research method and found that firm size has a positive and significant effect on performance of deposit taking Saccos. The results also revealed that a unit change in firm size led to change in ROA by 8%.

Studies conducted on firm size and organizational performance, have focused on how firm size affects business success, profitability and financial performance. For instance, Pervan and Visic (2013) looked at the influence of firm size on its business success; Olawale, Ilo and Fatai (2017) studied the effect of firm size on performance of firms in Nigeria; Nzioka (2013) investigated the effect of firm size on financial performance of banking industry in Kenya; and Karagu (2017) conducted a study to determine the effect of firm size on performance of deposit taking, saving and credit cooperatives in Kenya.

However, these studies conducted do not show the moderating effect of firm size on the relationship between organizational strategic resources and organizational performance. This study sought to investigate the moderating effect of firm size on the other variables which influence performance of saccos.

2.4.6 Organizational Performance

Using a cross-sectional survey design, Mmari and Thinyane (2019) conducted a study on the financial Performance of Savings and Credit Co-operative Societies (Saccos) in Maseru District in Lesotho. The financial measures of Savings and Credit Co-operative Societies include delinquency ratio, total loan delinquency, total loan portfolio, ratio of fixed assets to total assets, growth of members' shares and growth in savings.

Mwangi and Wambua (2016) examined the performance of SACCOS in Kenya with a specific focus on UNAITAS SACCO. The population of the study was managers in UNAITAS SACCO. The sample size was 50 percent of the target population who were selected using simple random sampling. The performance of SACCOs was measured using returns on assets, profitability and market share. Karagu and Okibo (2014) examined the performance of savings and credit co-operative organization in Kenya. The population of the study was the managers of various savings and credit co-operative organizations in Kenya. Performance was measured in terms of profit before tax, net assets, members' savings, loans disbursed and dividends paid.

Using a descriptive research design, Kinyua (2016) examined the financial performance of deposit taking savings and credit cooperative societies in Kenya. The study adopted a descriptive research design in which the opinions of employees in the Saccos were sought. The study targeted a population of 654 management employees working in the registered Saccos in Nairobi County. This study measured the financial performance in terms of Return on Asset (ROA), Return on Equity (ROE) and liquidity. In addition, Otieno and Oyugi (2016) examined the financial performance of savings and credit cooperative societies in Kisumu County. The study adopted a survey research design,

using 62 managing directors and finance managers at the 31 registered SACCOs in the County that are operational. The financial performance of savings and credit cooperative societies in Kisumu County was return on assets, return on investment and return on capital employed.

2.5 Critique of Existing Literature

Different studies have been done on organizational strategic resources and organizational performance both globally and locally. For instance, Gruber, Heinemann and Hungeling (2015) conducted a study on the effect of configurations of resources and capabilities on performance in technology ventures in the United States and found that based on a careful measurement of capabilities and resources in sales and distribution, resources and capabilities contribute significantly to performance in that functional area. However, while United States is developed country, Kenya is a developing nation and it is hard to generalize the findings of the study to Kenya. Further, the research was limited to technological ventures, which are different from SACCOS. In addition, the study focused on resources such as financial and physical resources and hence did not show the influence of technological and human resource on organizational performance.

Li, Zhou and Tian (2018) examined the relationship between technological configuration capability, strategic flexibility, and organizational performance in Chinese high-tech organizations and established that technological configuration capability improves the influence of strategic flexibility on organizational performance in ever changing and complex business environments. Since the economies, social environment and legal frameworks between China and Kenya are different, it is hard to generalize the study results to Kenya. In addition, the study focused on only one strategic resource, technological resource while this study focused on four strategic resources, which include financial resource, human capital, technological resource and physical resource.

Bakri (2017) conducted a study on the relationship between strategic resources for sustainable competitive advantage in Indonesia and established that physical, tangible

resources, intangible resources and human resources lead to a competitive advantage among firms. This research was based in Indonesia and thus it is impossible to generalize its results to the Kenyan situation. In addition, the dependent variable in this study was competitive advantage, which is different from organizational performance. Also, the study was limited to one company and hence it used a case study design, but the focus of this study was SACCOs in five Counties in Kenya.

Amoah-Mensah (2013) examined the relationship between strategic resources and performance of rural small and medium enterprises in Ghana and found that firms' internal and external resources affect the performance of rural small and medium enterprises. Nonetheless, the study was limited to SMEs in Ghana and hence its findings are not generalizable to SACCOs in Kenya. While this study used a survey research design, the current study adopted a descriptive explanatory research design.

Oghojafor, Kuye and Ogunkoya (2014) studied the association between strategic resources and organizational performance in Nigerian manufacturing Industry and found that technological capabilities do affect the firm performance. However, the study was limited to manufacturing firms in Nigeria and it is not prudent to generalize the findings to Kenyan SACCOs. In addition, this study used a cross sectional survey design, but the current study adopted a descriptive explanatory research design.

In Kenya, Njagi (2018) determined the effect of strategic resource on performance of public health sector in Embu County and deduced that performance of the health facilities studied was significantly and positively affected by their physical, financial and technological resources. However, the study was conducted on public health institutions in Embu County, which are governed by different regulatory framework as compared to SACCOs. The study adopted three of the four strategic resources utilized in this study and hence it did not look at human capital. The target population in this study was staff in the health sector, but the target population of this study was human resource, ICT, finance managers in SACCOs. In addition, the study used positivism research approach, but the current study utilized a pragmatic research approach.

Kogo and Kimencu (2018) researched on the effect of organizational capability on performance of insurance industry within Nairobi County and found that marketing capabilities, human source capabilities and technological capabilities have an effect on organizational performance. The study was based on insurance companies and due to differences on regulatory framework and organizational structures, its findings cannot be generalized to SACCOs. Further, this study used a descriptive research design, which is different from explanatory research design utilized in this study.

Mutunga, Minja and Gachanja (2014) studied the effect of resource configuration on firms' competitive advantages of food processing industry in Kenya and found that an organization's capabilities and resources are made up of the human, physical, organizational, human and financial assets used by the organization to come up with products, manufacture and deliver the products to their clients. Financial resources include equity, debt, and retained earnings among others. Nonetheless, while the dependent variable was competitive advantage, which is different from organizational performance, the study was limited to food processing firms and hence the findings cannot be generalized to SACCOs in Kenya. This study was conducted in Nairobi and Mombasa Counties, while the current study focused on more counties: Kiambu County, Meru County, Mombasa County, Nairobi County and Nyeri County.

Makanga (2011) examined strategic capabilities and firm's competitive advantages in Kenya and found that that adoption of strategic resources and capabilities allows a firm to be at an advantage compared to its competitors. This is achieved through being able to focus target clients much more effectively, customer satisfaction, customer retention and better market share and superior product pricing due to cost leadership advantage. However, the dependent variable was competitive advantage which is different from organizational performance. In addition, data in this study was collected from senior managers, while the current study collected data from middle level managers in the SACCOs.

2.6 Research Gaps

Although numerous researches have been done on organizational strategic resources and organizational performance, these studies are limited to specific countries, regions, sectors and institutions. From a global perspective, Gruber, Heinemann and Hungeling (2015) conducted a study on the effect of configurations of resources and capabilities on performance in technology ventures in the United States Li, Zhou and Tian (2018) examined the relationship between technological configuration capability, strategic flexibility, and organizational performance in Chinese high-tech organizations. And Amoah-Mensah (2013) examined the relationship between strategic resources and performance of rural small and medium enterprises in Ghana. Different countries are characterized by different business environments, technological adoptions, resources availability, economic environment and legal frameworks and hence the findings from one country may not necessarily be generalized to another country. In addition, these studies used different variables and methodologies from the current study.

Locally, Njagi (2018) determined the effect of strategic resource on performance of hospitals in Embu County Kogo and Kimencu (2018) assessed the effect of organizational capability on performance of insurance industry within Nairobi County Masaba and Kilika (2016) studied strategic resources, competitive advantage and firms' performance in Kenya Mutunga, Minja and Gachanja (2014) studied the effect of resource configuration on firms' competitive advantages of food processing industry in Kenya and Makanga (2011) examined strategic capabilities and firm's competitive advantages in Kenya. Due to differences in types of resources from one sector to another, the findings from one sector cannot be generalized to another sector. In addition, the findings of studies done in the public sector cannot be generalized to the private sector or SACCOs. This is because of the differences in organization structures and sources of various types of resources. In addition, studies conducted in Kenya on strategic resources and performance used different components of strategic resources, different research designs and different target populations. In view of these research gaps and in view of the critical role deposit taking SACCOs play in the national

economy it was imperative that a SACCO-specific study be undertaken to shed light on the factors that determine performance of DT SACCOs in Kenya.

2.7 Summary of Literature Reviewed

This study was anchored on five theories: Pecking Order Theory, Human Capital Theory, UTAUT Theory, Resource Based View Theory and Theory of Economies of Scale. The pecking order theory was useful to this research as it indicated the financing options SACCO managers have. All SACCOs largely use two sources of financing: members' deposits and debt. The use of these two sources, in one way or another, influences adequacy of funds and timely release of finances, which in turn influences organizational performance. Human capital theory tended to give explanation on the effect of the human capital in development of performance of deposit taking SACCOs. As a vital resource, human capital basically presents the knowledge, individual capability as well as skills of the staff in the SACCOs. UTAUT theory was used in this study to explain the importance of technological resource on organizational performance. This study used the resource based view theory to explain the effect of physical resources on organizational performance. SACCOs own physical resource such as buildings, land, office furniture, motor vehicles as well as computers and printers. Theory of Economies of Scale was useful as it gave an explanation on existing moderating relationship between firm size and organizational strategic resources and performance of DT SACCOs.

The empirical literature showed that financial resources affect organizational performance. Specifically, source of funds, adequacy of funds and timely release of funds have a positive effect on economic development and organizational performance. The literature also showed that human capital in terms of adequacy, skills, knowledge and competence affects organizational performance. If management of the human resources is done effectively, then the motivation and productivity of the workers rises which sees the firm create more value. The literature review also showed that technological resource and capabilities affect organizational performance. The efficiency

of operations in a SACCO is subject to proper matching of the available information technology and the SACCO functions. Information technology investment favorably affects profitability and improves revenue and performance of the firm because it allows the organization take advantages of opportunities that allow it to be better positioned in the market.

In addition, physical resources, such as technology and equipment and the location of the firm affect organizational performance. Adequacy, quality, capacity and the maintenance of SACCO physical resources are important aspects that can improve the performance of the SACCOs. Further, the literature outlined that firm size influences organizational performance due to economics of scale. Economies of scales that characterize larger firms operations allow them to be sustainable. Therefore, organizational strategic resources in terms of financial resource, human capital, technological resource and physical resource was considered to be a key factor in the performance of organizations. It was thus important to examine the effect of organizational strategic resources on the performance of Kenyan Savings and Credit Cooperative Societies and the moderating effect that firm size could have on their effectiveness.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers the research design, the target population, sampling frame, sample size and sampling technique, tools of data collection, pilot testing, data collection procedure as well as data analysis and presentation.

3.2 Research Design

This study made use of a descriptive explanatory research design. Explanatory research design, also referred to as causal research technique, deduces the cause and effect relationship between variables (Stokes & Wall, 2017). Explanatory studies analyze a given problem or situation and try to give a deeper understanding on the relationship existing between the variables. While doing the research, the researcher is expected to adapt the design and analysis in line with the discovered data and insights (Creswell, 2014). The reason why an explanatory research technique was preferred was because the research objective is to find out the cause and effect relationship between organizational strategic resources and performance of deposit taking SACCOs. The descriptive research design aspect of it attempted to provide more details and insights from the respondents on how the dependent variables affect performance of DT SACCOs. This descriptive explanatory research design enabled the researcher to go deep into the interaction of the SACCOs strategic resources and their performance. It enabled the researcher to analyze the findings and draw informed conclusions. The descriptive approach was also used because it provided an opportunity to combine both quantitative and qualitative approaches of data collection and analysis.

3.2.1 Research Philosophy

A research philosophy refers to a belief on how the data about the study situation should be collected, analyzed and utilized (Bhattacherjee, 2012). The study adopted a pragmatic research paradigm. This paradigm is deconstructive in nature and uses more than one method of research which helps do away with contentious issues such as reality and truth choosing to look at what works as the truth when it comes to the phenomenon under study. Those in support of this research philosophy argue that there is more than one way to interpret situations and one point of view cannot provide the complete picture of a research problem. According to this philosophy multiple truths or realities do exist and one single method may not bring out the totality of the system, process or people being studied (Bryman, 2013). This pragmatic approach uses the research objectives being investigated to determine the most appropriate research method. This method can use both positivist (advocating for quantitative research approach) and interpretive (advocating for qualitative research method) approaches in one research depending on the nature of the research questions (Metsamuuronen, 2017).

The pragmatic approach gives researcher the freedom to use any of the techniques, procedures or methods that are associated with qualitative and quantitative research. Pragmatic research philosophy recognizes that there are numerous ways of interpreting and understating a particular research subject. The interpretivism and positivism are the two mutually exclusive paradigms about the nature and knowledge sources (Bhattacherjee, 2012). The advantage of pragmatic research paradigm is that it recognizes that every procedure or method tend to have its own limitations hence the different liberal approaches (interpretivism and positivism) are complementary. Since pragmatic research approach advocates for the use of quantitative and qualitative research techniques, it was the most appropriate research design in this study as it sought to examine the role of organizational strategic resources on the performance of deposit taking SACCOs.

3.3 Target Population

Target population is the entire set of individuals (or objects) having the same characteristics as pointed out in the sampling criteria used for the study (Bryman, 2013). The target population makes a part of the universal population (Creswell, 2014). The unit of analysis is what is being targeted in the research. The unit of analysis in this study was all the Deposit-taking SACCOs in five selected counties in Kenya. These Counties included Kiambu County, Meru County, Mombasa County, Nairobi City County and Nyeri County. These counties were selected because they have the highest concentration of the registered head-offices (44%) of deposit taking SACCOs in Kenya (SASRA, 2017). The object from which information is obtained is referred to as a unit of observation (Cooper & Schindler, 2006). The unit of observation of this study was Finance, Human Resource, ICT and Property managers and chief Accountants in selected 84 deposit-taking SACCOs in the five counties in Kenya. Finance, Human Resource, ICT and Property managers were used in this study as they are in charge of financial, human, technological and physical resources (variables of the study), respectively. The target population was therefore 354 managers in charge of finance, human resource, ICT and chief accountants in the 84 deposit-taking SACCOs in the five counties as shown in Table 3.1.

Table 3.1: Target Population

County	Number of Saccos	Finance	Human Resource	ICT	Property	Total
Kiambu County	14	14	14	20	9	57
Meru County	12	12	11	12	12	47
Mombasa County	7	7	7	7	7	28
Nairobi County	43	43	49	53	40	185
Nyeri County	8	8	8	10	11	37
Total	84	84	89	102	79	354

Source: Sacco Societies Regulatory Authority (2017)

3.4 Sampling Design

This provides a roadmap to establishment of a suitable sample on which the research was undertaken. This comprised identification of the sampling frame and development of an appropriate sampling technique.

3.4.1 Sampling Frame

A sampling frame refers to a list of all items in a given population from which the study's sample is drawn (Saunders, Lewis & Thornhill, 2012). It can also be defined as a list of everything that the researcher wants to investigate or study. A sampling frame provides a list of all units of interest in the study. A sampling frame as defined in statistics is the source from where a sample is chosen. It lists all the participants that can be sampled and these can be in form of individuals, institutions or households (Bhattacherjee, 2012). According to Collis and Hussey (2014), a sample frame is a list of cases or units (documents, individuals, organizations and departments) of a particular population under investigation. The sampling frame of the study was 354finance, human resource, ICT and property managers in the selected 84 deposit taking SACCOs in the top five Counties.

3.4.2 Sample and Sampling Techniques

Sample refers to a part of or fraction of population that is being investigated upon. It can also be defined as a group of individuals who are engaged or participating in a study. Wilson (2014) defined it as selected elements such as objects, subjects or people that participate in a particular study. Samples are used to reflect the entire attributes of a given population under investigation such that the study's findings can be generalized to the entire population. A good sample size should be enough to adequately represent the characteristics of the population being studied. Sahu (2013) notes that the best sample should give enough data on the population and this data should be adequate and capable of being analyzed easily.

3.4.3 Sampling Technique

Purposive sampling was used to select finance, human resource, ICT and property managers. The study was of the view that finance, human resource, ICT, property managers and chief Accountants have information on the finance resource, human capital, ICT, technological resource and physical resources in deposit taking SACCOs. The 184 managers were chosen using stratified random sampling technique. This sampling technique divides the population into groups or strata. The strata are reached upon on the basis of the shared traits (Singpurwalla, 2013). In this study the strata comprised of finance managers, human resource managers, ICT managers, property managers and chief accountants. One of the advantages of stratified random sampling is that it allows for each of the strata to be well represented when the sample is chosen (Bryman & Cramer, 2012). Stratification is grouped into proportionate or disproportionate bands. When the stratified technique is used the size of the sample is proportionate to the stratum population size (Creswell, 2014). In this study, the sample size in every stratum was reached at using the formula below by Walliman (2011).

$$n_h = \frac{N_h}{N} * n$$

Where;

n_h is the sample size for stratum *h*,

N_h is the stratum *h* population size,

N is total population size,

n is total sample size.

3.4.4 Sample Size

The study's sample size was reached at using Krejcie and Morgan sample size determination formula (Russell, 2013). Using this formula a representative sample was obtained. The study's total population was 354 finance managers, human resource managers, ICT managers and property managers in Deposit-Taking SACCOs in Kenya.

The formula used for arriving at the sample size was;

$$n = \frac{x^2 NP(1-P)}{\left(ME^2(N-1)\right) + \left(x^2 P(1-P)\right)}$$

Where:

n=sample size

x^2=Chi-square for the specified confidence level at 1 degree of freedom

N=Population size

P = is the proportion in the target population estimated to have characteristics being studied. As the proportion was unknown, 0.5 was used.

Chuan and Penyelidikan (2016) indicate that the use of 0.5 provides the maximum sample size and hence it is the most preferable.

ME=desired margin of Error (Expressed as a proportion)

$$n = \frac{1.96^2 354 * 0.5 * 0.5}{(0.05^2 * 353) + (1.96^2 * 0.5 * 0.5)}$$

$$n = 184$$

Table 3.2: Sample Size

County	Number of Saccos	Finance	Human Resource	ICT	Property	Total
Kiambu County	14	7	7	10	5	29
Meru County	12	6	6	6	6	24
Mombasa County	7	4	4	4	4	16
Nairobi City County	43	22	25	28	21	96
Nyeri County	8	4	4	5	6	19
Total	**84**	**43**	**46**	**53**	**42**	**184**

3.5 Data Collection Instruments

Primary and secondary data were sought by the researcher for the study. Greenfield and Greener (2016) indicates that primary data is made up of first-hand information that has not been processed or analyzed. A questionnaire which is a form of quantitative data collection tool can also be used to collect primary data. The study's primary data was obtained using semi-structured questionnaires. Secondary data was collected by use of a checklist from the annual reports of various SACCOs. A checklist is used to collect information needed from online sources and organization reports. Secondary data was used support the findings from primary data.

Questionnaires were used to collect data from finance managers, human resource managers, ICT managers and property manager/chief accountants. The structured questions were useful as they enabled easy analysis of data and reduced the time and resources needed for data collection. The unstructured questionnaires were used by the researcher to get in-depth responses from the respondents as they gave a chance to them to provide views and suggestions on the various issues. Metsamuuronen (2017) points out that a questionnaire is a cheap tool for data collection yet very effective in collecting

information from a large population. Further the data would not be biased as the questionnaire guarantees anonymity. The researcher chose to use a questionnaire as a tool of data collection due to sensitivity of some of the data sought and the need to maintain the anonymity of the staffs.

The questionnaire had eight sections, with the first part introducing the purpose of the information requested and instructions on how to complete the questionnaire; the second part requesting the respondent's socio-demographic data. Part three composed of six sections and had data on the dependent variable (deposit taking SACCOs' performance) and independent variables of the research namely financial resource, human capital, technological capacity and physical assets. The sixth section of this part sought data on the firm size the moderating variable.

3.6 Pilot Study

A pilot study, or, pilot test or pre-test is defined as a small-scale preliminary research that is conducted so as to evaluate time, cost and feasibility to improve on the design of a particular study prior to conducting the actual one or full-scale research project (Babbie, 2017). Pre-test is used to determine feasibility of carrying out the actual or large scale study. Pilot test also informed the researcher on the weaknesses and strength of the proposed research. Further, pre-testing is used to determine reprocatability of variables, measurement of errors that can occur during the actual study and to improve efficiency of data collection instrument.

The researcher carried out a pilot study to ensure the data collection tool was reliable and valid. The pilot test was used to correct some of the challenges encountered before undertaking the final study. The pretesting sample consisted of 18 finance, human resource, ICT and property managers taken from deposit taking SACCOs in Kiambu County, representing 10% of the sample size. Kiambu County was selected due to its proximity to Nairobi City County. According to Singpurwalla (2013), a pilot study sample size should ideally be 10% of the study sample. The results from the pilot test

were not used in the main study. In addition, the managers at deposit taking SACCOs in the pilot test did not participate in the main study.

3.6.1 Validity of the Research Instrument

Validity of a research tool is the extent to which it measures what it is supposed to measure. Content validity is the extent to which the items used to represent a construct give a representative sample of the construct population (Saunders, Lewis & Thornhill, 2012). Since there is no measure to determine content validity, the experts in the field of study often determine the content validity of the study. Face and content validity for the current research was determined by experts and researcher's supervisors (Fraenkel, 2014). The researcher enhanced the validity of the research tool by coming up with the research questions that are in line with the study objectives. Construct validity indicates the extent to which a measurement method accurately represents a construct and produces a consistent observation, distinct from that which is produced by a measure of another construct. The studied used Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity to test the construct validity of the research instrument.

3.6.2 Reliability of the Research Instrument

Reliability refers to a measurement that supplies consistent results over different situations. It measures consistency, precision, repeatability, and trustworthiness of a research instrument (Egbert, 2015). A high reliability means that a measure is able to give similar results under similar conditions (Kothari, 2012). Cronbach's alpha coefficient was used to test the reliability of data. Cronbach's alpha whose range is between 0 and 1 measures internal consistency and the extent of the relationship between the set of items in a group. It also quantifies scale reliability (Fraenkel, 2014). If the alpha coefficient is high then there is high reliability among the items under study. An acceptable value of Cronbach alpha is 0.7 or more, a value that is lower than 0.7 is questionable (Singpurwalla, 2013).

3.7 Data Collection Procedures

Data collection procedure refers to an approach for gathering and measuring data on elements or variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes (Babbie, 2017). Data collection procedure enables the researcher to develop appropriate instruments for data collection and clearly provides instruction for its use to minimize the likelihood of error occurrence.

The researcher obtained an introductory letter for data collection from Jomo Kenyatta University of Agriculture and Technology was obtained. A research permit was also obtained from National Commission for Science, Technology and Innovation. The researcher also recruited and trained two research assistants to help in distribution and collection of completed questionnaires. The collection of data was conducted by use of the drop-off and pick-up-later method and the completed questionnaires were collected a week later. This accorded the respondents enough time to answer the questions. The researcher used this method due to the variances in respondents' time availability and the geographical spread of the selected SACCOs.

3.8 Data Analysis and Presentation

Quantitative and qualitative data was generated from the closed-ended and open-ended questions respectively. Qualitative data was analyzed on of thematic basis and the findings provided in a narrative form. Before the data could be analyzed, the researcher ensured the data was checked for completeness, followed by data editing, data coding, data entry, and data cleaning. Inferential and descriptive statistics were employed for analysis of quantitative data with the assistance of Statistical Package for Social Sciences. To summarize the respondent's responses in relation to their views on the various aspects of the variables, and the respondents' demographic information, analysis was undertaken using descriptive statistics (Bhattacherjee, 2012).

Descriptive statistics such as frequency distribution, mean (measure of dispersion), standard deviation, and percentages were used. Descriptive statistics are very important because if the researcher simply presented raw data it would be hard to deduce what the data was showing, especially where there was a lot of it. Descriptive statistics therefore enables researchers to present the data in a more meaningful way, which allows simpler and easier interpretation (Singpurwalla, 2013).Inferential data analysis was conducted by use of univariate regression analysis, Pearson correlation coefficient, and multiple regression analysis. Inferential statistic is used to make judgments about the probability that an observation is dependable or one that happened by chance in the study. Before conducting inferential statistics, the researcher conducted diagnostic tests.

3.8.1 Diagnostic Tests

Linear regression deduces if one or more of the predictor variables does give an explanation on the dependent (criterion) variable. The assumptions of the regression model include normality, linear relationship, no or little multicollinearity, autocorrelation and heteroscedasticity

To fulfill the requirement of normal distribution, Shapiro Wilk test helped deduce if the variables distribution was normal (Saunders, Lewis & Thornhill, 2012). The assumption for testing hypothesis is that sample of the variables are drawn from data with a normal distribution. The null hypothesis of this test is that the population is normally distributed. If the p-value was lower than the indicated alpha value then the null hypothesis would be rejected and this would show that the population from which the data was obtained was not normally distributed. This would mean that the data is not normal. The opposite would be true if the value of p was higher than the given alpha value then the null hypothesis cannot be rejected showing that the population from which the data was obtained was normally distributed and thus the data was normal.

Multicollinearity occurs in regression in instances where some of the predictor variables are correlated with one another**.** One variable can be predicted from the other with some

degree of accuracy (Singpurwalla, 2013). In perfect multicollinearity, the predictor is singular and cannot be inverted. Multicollinearity was tested for in this study using tolerance and variance inflation factor (VIF). The tolerance tests the effect of the independent variable on an independent variables and it is shown using a linear regression analysis. When VIF > 10 then multicollinearity exists and when VIF > 100 it is certain that multicollinearity is in the sample. For the assumption to hold the VIF statistic should be VIF <10.

Linear regression assumes the relationship between the study variables to be linear. Linear regression is affected by outliers so it is essential that outliers are checked (Creswell, 2014). A scatter plot is the best way to test the linear assumption. The scatter plot is drawn using x and y residuals values. If the scatter plot takes a linear pattern then the linear assumptions are adhered to.

A linear regression analysis needs there to be no or minimal autocorrelation in the used data. Autocorrelation happens when the residuals are not independent from each other (Wilson, 2014). The Durbin-Watson test is often used to test autocorrelation in a linear regression model. The d value in this test takes the values of 0 to 4. The accepted values are $1.5 < d < 2.5$ indicating the absence of auto-correlation. The test however only tests for linear autocorrelation between direct neighboring data or first order effects. Values outside this range indicate existence of autocorrelation.

In Linear regression analysis, if data has heteroscedasticity the results are likely to be biased (Creswell, 2014). The study used Breusch-Pagan/Cook-Weisberg test for heteroscedasticity. Heteroscedasticity exists if the variance of the error term varies across observations. According to the null hypothesis, a constant variance exists while the alternative hypothesis purports that heteroscedasticity does exist. The violation of homoscedasticity increases as heteroscedasticity increases.

3.8.2 Regression Analysis

The relationship between the study variables was tested using univariate and multivariate regression models. The univariate model is simple with one predictor and a single outcome while the multivariate model is complex with a single outcome but more than one predictor.

The following are regression models for testing the hypotheses:

Regression model for hypotheses 1;

$H_0$1: Financial resource has no significant effect on the performance deposit taking SACCOs in Kenya

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Whereby;

Y = Performance

B_0 = Constant

B_1 =Coefficients of determination

X_1 = Financial resource

ε = Error term

Regression model for hypotheses 2;

$H_0$2: Human capital has no significant effect on the performance deposit taking SACCOs in Kenya

$$Y = \beta_0 + \beta_2 X_2 + \varepsilon$$

Whereby;

Y = Performance

B_0 = Constant

B_2 =Coefficients of determination

X_2 = Human capital

ε = Error term

Regression model for hypotheses 3;

$H_0$3: Technological resource has no significant effect on the performance deposit taking SACCOs in Kenya

$$Y = \beta_0 + \beta_3 X_3 + \varepsilon$$

Whereby;

Y = Performance

B_0 = Constant

B_3 =Coefficients of determination

X_3 = Technological resource

ε = Error term

Regression model for hypotheses 4;

$H_0$4: Physical resource has no significant effect on performance of deposit taking SACCOs in Kenya

$$Y = \beta_0 + \beta_4 X_4 + \varepsilon$$

Whereby;

Y = Performance

B_0 = Constant

B_4 =Coefficients of determination

X_4 = Physical resource

ε = Error term

Moderation in this case happens when the relationship between the independent variables and the dependent variable is influenced by the introduction of another variable. This additional variable is the moderator. The effect that this variable has is termed as interaction as it affects the direction or strength of the relationship between the dependent variable (performance of deposit –taking SACCOs) and the independent variables. To get the moderating effect of the firm size on the relationship between the dependent and independent variables, the researcher used multiple regression models.

$H_0$5: Firm size has no significant moderating influence on the relationship between organizational strategic resources and deposit taking SACCOs in Kenya.

The model for $H_0$5 analysis was as below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_z X + \beta_{1z} X_1 Z + \beta_{2z} X_2 Z + \beta_{3z} X_3 Z + \beta_{4z} X_4 Z + \varepsilon$$

Where:-

Y is the dependent variable, Performance

β_0 is the constant

i_f is the coefficient of X_i for i=1,2,3,4

X_1 = Financial resource

X_2 = Human capital

X_3 = Technological resource

X_4 = Physical resource

Z is the hypothesized moderator (Firm Size)

β_z is the coefficient of X_i *Z the interaction term between firm size and each of the independent variables for i=1,2, 3,4; ε is the error term

The data was further analyzed to test if organizational strategic resources have no significant effect on deposit taking SACCOs in Kenya. Thus:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Whereby;

Y = Performance

β_0 = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficients of determination

X_1 = Financial resource

X_2 = Human capital

X_3 = Technological resource

X_4 = Physical resource

ε = Error term

3.8.3 Test of Hypotheses

The hypothesis was tested using correlation analysis and regression analysis. Using a 95% confidence level and a 0.05 significance level, the independent variable had a significant effect on the dependent variable if the p value was lower than 0.05.

Table 3.3: Hypothesis Testing

Hypothesis	Type of Analysis	Interpretation of Results
$H_0$1: Financial resource has no significant effect on deposit taking SACCOs in Kenya.	Correlation analysis Regression analysis	For $p < 0.05$, $H_0$was rejected; and H_A not rejected
$H_0$2: Human capital has no significant effect on performance of deposit taking SACCOs in Kenya.	Correlation analysis Regression analysis	For $p < 0.05$, $H_0$was rejected; and H_A not rejected
$H_0$3: Technological resource has no significant effect on the deposit taking SACCOs in Kenya.	Correlation analysis Regression analysis	For $p < 0.05$, $H_0$was rejected; and H_A not rejected
$H_0$4: Physical resource- has no significant effect on deposit taking SACCOs in Kenya.	Correlation analysis Regression analysis	For $p < 0.05$, $H_0$was rejected; and H_A not rejected
$H_0$5: Firm size has no significant moderating effect on the relationship between organizational strategic resources and deposit taking SACCOs in Kenya.	Correlation analysis Regression analysis	For $p < 0.05$, $H_0$was rejected; and H_A not rejected

3.9 Operationalization of Variables

Table 3.4 shows measurement of variables of the study, how they were measured, the research instrument that was used and how the data was analyzed.

Table 3.4: Operationalization of Variables

Variable	Indicators	Measurement scale	Instrument for Collection of data	Analysis of data
Performance	• Financial performance • Customer satisfaction • Internal business processes	Ordinal	Questionnaire Data extraction tool	• Mean • Standard deviation • Correlation Analysis • Regression analysis
Financial resource	• Source of funds • Adequacy of funds • Timely release of funds	Ordinal	Questionnaire	• Mean • Standard deviation • Correlation Analysis • Regression analysis
Human capital	• Adequacy of staff • Skills • Experience	Ordinal	Questionnaire	• Mean • Standard deviation • Correlation Analysis • Regression analysis
Technological resource	• Mobile banking • Automated teller Machines • Management Information system	Ordinal	Questionnaire	• Mean • Standard deviation • Correlation Analysis • Regression analysis
Physical resource	• Office furniture • Office Equipment • Buildings and land	Ordinal	Questionnaire	• Mean • Standard deviation • Correlation Analysis • Regression analysis
Firm size	• Number of staff • Number of SACCO members • Total Assets	Ordinal	Questionnaire	• Mean • Standard deviation • Correlation Analysis • Stepwise Regression analysis

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The chapter entails collection and analysis of data, presentation and interpretation of the findings and discussion as regards the objective of this study. The purpose of the study was to assess how organizational strategic resources namely financial resource, human capital, technological resource and physical resource affect performance of deposit taking SACCOs in Kenya and how firm size moderates the relationship between the organizational strategic resources and deposit taking SACCOs in Kenya. The first section in this chapter is the questionnaire's response rate. This is followed by the presentation of the results of reliability and validity test and background information of the staffs at deposit taking SACCOs. The fourth section presents the descriptive results of the dependent variable, independent variables and the moderating variable. The fifth section details results on the inferential statistics covering diagnostic tests, correlation analysis, and univariate regression analysis as well as moderating effect analysis. The results are also presented in tables and figures.

4.2 Response Rate

The sample size of the study comprised of 184 managers working in deposit-taking SACCOs in five selected counties in Kenya, which included Kiambu County, Meru County, Mombasa County, Nairobi City County and Nyeri County. These counties were selected because between them they comprise the highest concentration of SACCOs. The questionnaires were dropped and timelines agreed with the staffs at deposit taking SACCOs on when to return to pick them. Out of 184 questionnaires which were distributed, 176 were duly filled and returned. The drop-off and pick-up-later method yielded the high response rate of 95.65%. According to Orodho (2003), response rate is the ratio of the interviewed respondents to the sample size intended to be covered by the

study. According to Nulty (2011), a response rate of 75 per cent is adequate for analysis as well as making conclusions and inferences about a population. In addition, Fincham (2014) indicates that a response rate of 60% and above is acceptable for analysis. Further, Kothari (2012) indicates that a response rate of 50% should be considered average, 60% to 70% considered adequate while a response rate of above 70% should be regarded as excellent. This implies that the response rate of 95.65% was adequate for analysis, drawing conclusions and reporting.

Table 4.1: Response Rate

Category	Sample Size	Response	Response rate
Human Resource Manager	46	42	91.30
ICT manager	53	52	98.11
Chief Accountant	41	40	97.56
Finance Manager	44	42	95.45
Total	**184**	**176**	95.65

4.3 Pilot Study Results

4.3.1 Reliability

According to Singpurwalla (2013), conducting a pre-test enables a researcher to assess the validity of data extraction tool through elimination of ambiguous questions. A pilot survey of 17 respondents comprising of 10% of the sample size was carried out on four deposit taking SACCOs to test the reliability and validity of the research instrument intended to be used in the research study. The data collected from the pilot study was not used in the final analysis.

Some inconsistencies were evident in some questions and they were addressed by reforming the questionnaires. A reliability test is usually carried out on the Likert questions. An internal consistency technique was applied using Cronbach's Alpha. The

Cronbach alpha values range between zero and one as reliability tend to increase with increase in Cronbach alpha values. According to Kothari (2012) Cronbach's Alpha coefficient of 0.7 and above, is within accepted rule of thumb thus depicts good reliability. All the Cronbach alpha values of the variables under investigation were above 0.7.

From the findings, the construct performance of SACCOs had an average Cronbach's reliability alpha of 0.9445, financial resource had a Cronbach's reliability alpha of 0.872, human capital had an average Cronbach's reliability alpha of 0.754, technological resource had a Cronbach's reliability alpha of 0.760, physical resource had an average Cronbach's reliability alpha of 0.824 and firm size had a Cronbach's reliability alpha of 0.942. This shows that the research instrument met the reliability criteria (α>0.7).

Table 4.2: Reliability Test Results

Variable	Cronbach's Alpha	Number of items	Interpretation
Performance of SACCOs	0.9445	13	Excellent
Financial Resource	0.872	12	Excellent
Human Capital	0.754	13	Excellent
Technological resource	0.760	12	Excellent
Physical resource	0.824	12	Excellent
Firm size	0.942	10	Excellent

4.3.2 Validity

According to Cooper and Schindler (2003), validity can be achieved by pre-testing the instrument to be used through the identification and changing of any irrelevant, ambiguous, awkward, or offensive questions and technique. Some inconsistencies were evident in some questions. The statements under the duration of employees in the organization were grammatically wrong. For example, the statement "How many years have you worked in this deposit taking SACCO" should read "How long have you been

working in deposit taking Savings and Credit Cooperative Societies?" In addition, the duration category had grammatical errors and the categories were overlapping and hence needed adjustments. For instance, 5 years is included in category 2 and 3, that is, "between 1-5 years" and "between 5-15 years".

The study also conducted Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity. The Kaiser-Meyer-Olkin mainly measures the sampling adequacy. This test shows that proportion of variance in the variables that can be attributed to underlying factors. Values close to one show that there were sufficient relationships among variables while values below five show that there are insufficient relationships among variables. The Bartlett's test of sphericity test is used in testing the hypothesis that the correlation matrix is an identity matrix. This simply indicates that there are sufficient relationships among variables (Wilson, 2010).

From the findings, performance of deposit taking SACCOs had a KMO measure of sampling adequacy of 0.749, which was above the threshold of 0.5. Barlett's test of sphericity was significant (chi-square= 626.441, p=0.000), showing that there were sufficient relationships among statements measuring performance of deposit taking SACCOs.

In addition, financial resource had a KMO measure of sampling adequacy of 0.717, which was above the threshold of 0.5. Barlett's test of sphericity was significant (chi-square= 832.451, p=0.000), showing that there were sufficient relationships among statements measuring financial resource. Further, human capital had a KMO measure of sampling adequacy of 0.782, which was above the threshold of 0.5. Barlett's test of sphericity was significant (chi-square= 740.648, p=0.000), showing that there were sufficient relationships among statements measuring human capital. Also, technological resource had a KMO measure of sampling adequacy of 0.787, which was above the threshold of 0.5. Barlett's test of sphericity was significant (chi-square= 921.281, p=0.000), showing that there were sufficient relationships among statements measuring technological resource.

Additionally, physical resource had a KMO measure of sampling adequacy of 0.774, which was above the threshold of 0.5. Barlett's test of sphericity was significant (chi-square= 1363.483, p=0.000), showing that there were sufficient relationships among statements measuring physical resource. In addition, firm size had a KMO measure of sampling adequacy of 0.784, which was above the threshold of 0.5. Barlett's test of sphericity was significant (chi-square= 630.814, p=0.000), showing that there were sufficient relationships among statements measuring firm size.

Table 4.3: Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity

Variables	**Kaiser-Meyer-Olkin Measure of Sampling Adequacy**	**Bartlett's Test of Sphericity**		
		Approx. Chi-Square	**do**	**Sig.**
Performance of Deposit taking SACCOs	0.749	626.441	78	0.000
Financial Resource	0.717	832.451	66	0.000
Human Capital	0.782	740.648	78	0.000
Technological resource	0.787	921.281	66	0.000
Physical resource	0.774	1363.483	66	0.000
Firm size	0.784	630.814	45	0.000

4.4 Demographic Information

The first section of data extraction tool (questionnaire) comprised of the staffs at deposit taking SACCOs' demographic information, which used nominal scale. The background information consisted of the staffs at deposit taking SACCOs' highest level of education and the duration of time they had worked in their respective SACCOs.

4.4.1 Respondents' Level of Education

The human resource managers, ICT managers, chief accountants and finance managers in the deposit taking Savings and Credit Cooperative Societies were asked to indicate their highest level of education. The results were as depicted in Figure 4.1. According to the results, 50% of the staff specified that they were undergraduates, 34.7% had masters' degrees, 10.8% had college diplomas, 2.8% had others and 1.7% had school certificates. Those who indicated that they had others also specified that they had PhDs. These findings imply that a vast majority (over 84.7%) of the human resource managers, ICT managers, chief accountants and finance managers in the deposit taking SACCOs in Kenya had at least undergraduate degrees. The findings imply that the managers at deposit taking SACCOs had adequate level of education to perform their respective duties and also to understand and answer appropriately questions related to the study objectives.

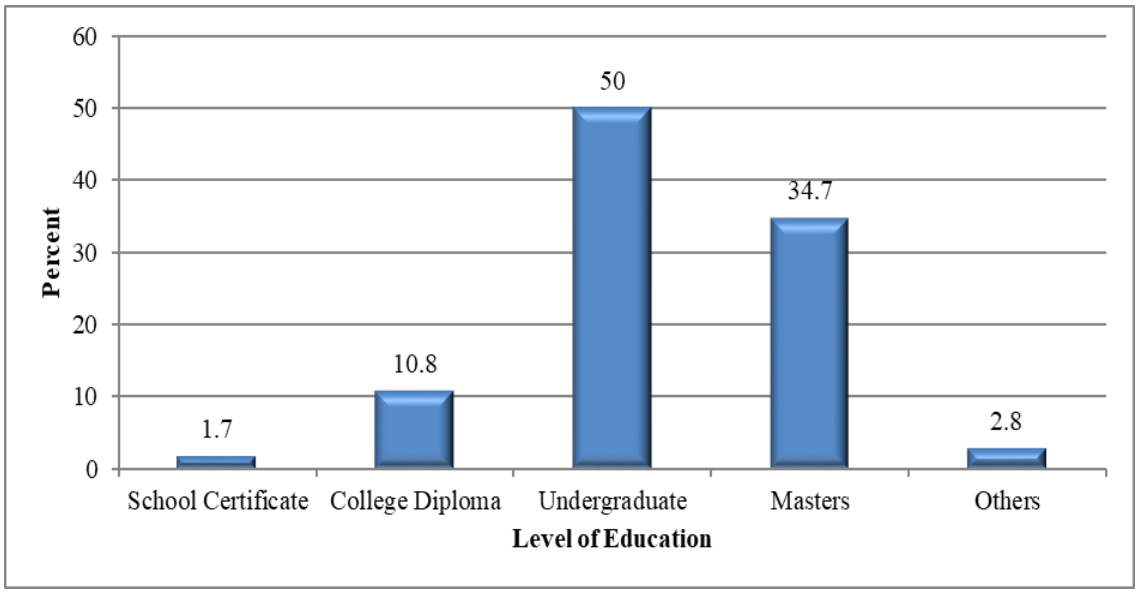

Figure 4.1: Respondents' Highest Level of Education

4.4.2 Respondents' Duration of Working in Deposit Taking SACCOs

The staffs were asked to specify their duration in the deposit taking SACCOs. The results were as presented in Figure 4.2. According to the findings, 49.4% of the managers indicated that they had been working in their SACCOs for between 6 and 15 years, 38.6% indicated for between 1 and 5 years, 6.3% indicated for less than one year and 5.7% indicted for more than 15 years. These findings show that most of the managers in deposit taking SACCOs had been working in their organizations for more than 6 years.

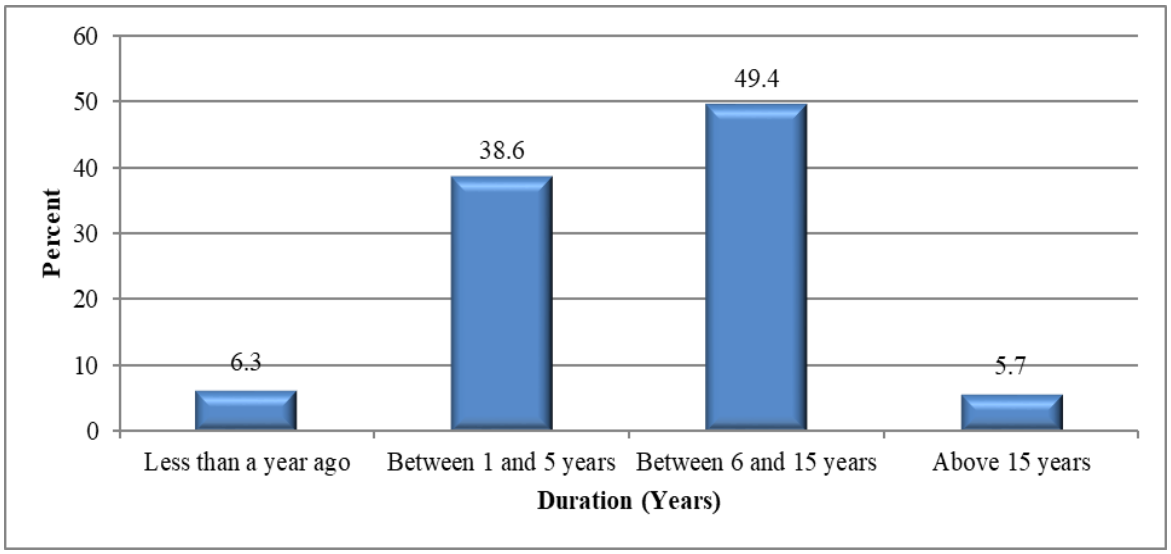

Figure 4.2: Respondents' Duration of Working in Deposit Taking SACCOs

4.5 Diagnostic Tests

The underlying assumptions in linear regression include: normality, no autocorrelation, little or no multicollinearity, homoscedasticity and linear relationship. In case of violation of the regression assumptions, the confidence intervals as well as other scientific insights derived from the regression model may be regarded as misleading, biased or inefficient and therefore the inferences derived incapable of being generalizable on other data.

4.5.1 Test for Normality

Shapiro-Wilk test was used to test the normality of data. Null hypothesis in Shapiro–Wilk test indicate that variables data are obtained from a normally distributed population (Cooper & Schilndler, 2006). Therefore, the p-value should be greater than the significant level of 0.05. According to the findings, as shown in Table 4.4 the respective p-values were: performance of SACCOs (p value=0.061), financial resource (p value=0.115), human capital (p value=0.097), technological resource (p value=0.101), physical resource (p value=0.064) and firm size (p value=0.079). All the p-values are above the predetermined p-value significance threshold of 0.05 and therefore we do not reject the null hypothesis that the sample data were obtained from a normally distributed population. This implies that the data for all the variables were normally distributed.

Table 4.4: Tests of Normality

	Statistic	**do**	**Sig.**
Performance of SACCOs	.969	176	.061
Financial Resource	.987	176	.115
Human capital	.981	176	.097
Technological Resource	.985	176	.101
Physical Resource	.976	176	.064
Firm Size	.979	176	.079

4.5.2 Q-Q Plots

A Q-Q plot, which is also referred to as quantile to quantile plot, is a graphical tool used in the assessment of whether or not data set comes from theoretical distributions like exponential or normal. Generally, a Q-Q plot is a type of scatter plot developed through plotting two sets of quantiles against each other. If both sets of quantiles come from same distribution, they should form a roughly straight line (Singpurwalla, 2013).

Figure 4.3 shows that observed value and expected normal value for the variable performance of deposit taking SACCOs have come from a population with normal distribution. Even if the two distributions compared are not identical, they appear to form close to 45 degrees line to show that Y=X. This implies that the data for the variable performance of deposit taking SACCOS comes from a normal population.

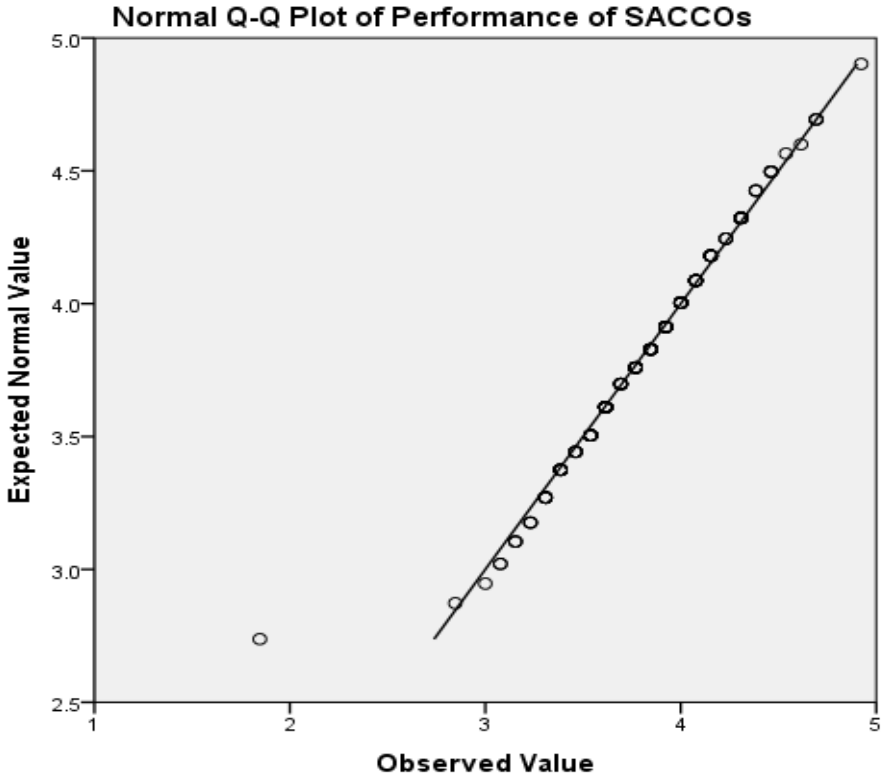

Figure 4.3: Normal Q-Q plot of Performance of Deposit Taking SACCOs

Figure 4.4 shows that observed value and expected normal value for the variable financial resource have come from a population with a normal distribution. The two distributions compared are identical, they appear to form close to 45 degrees line to show that Y=X. This implies that the data for the variable financial resource comes from a normally distributed.

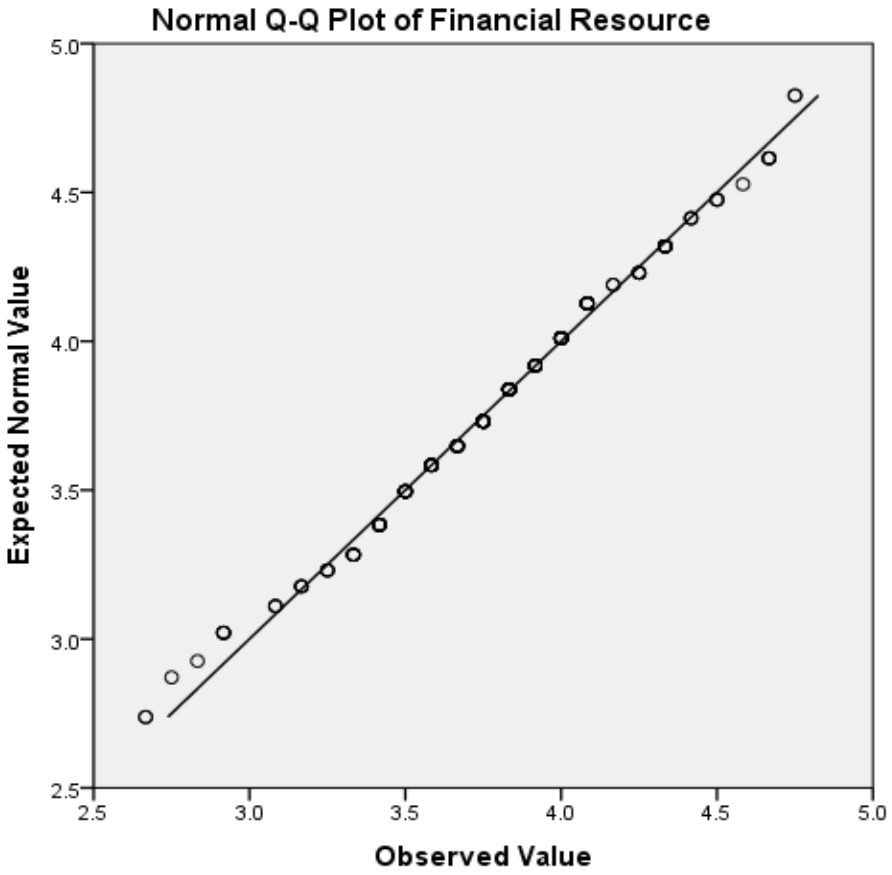

Figure 4.4: Normal Q-Q plot of Financial Resource

Figure 4.5 shows that observed value and expected normal value for the variable human capital have come from a population with a normal distribution. The two distributions compared are identical, they appear to form close to 45 degrees line to show that Y=X. This implies that the data for the variable human capital comes from a normal population.

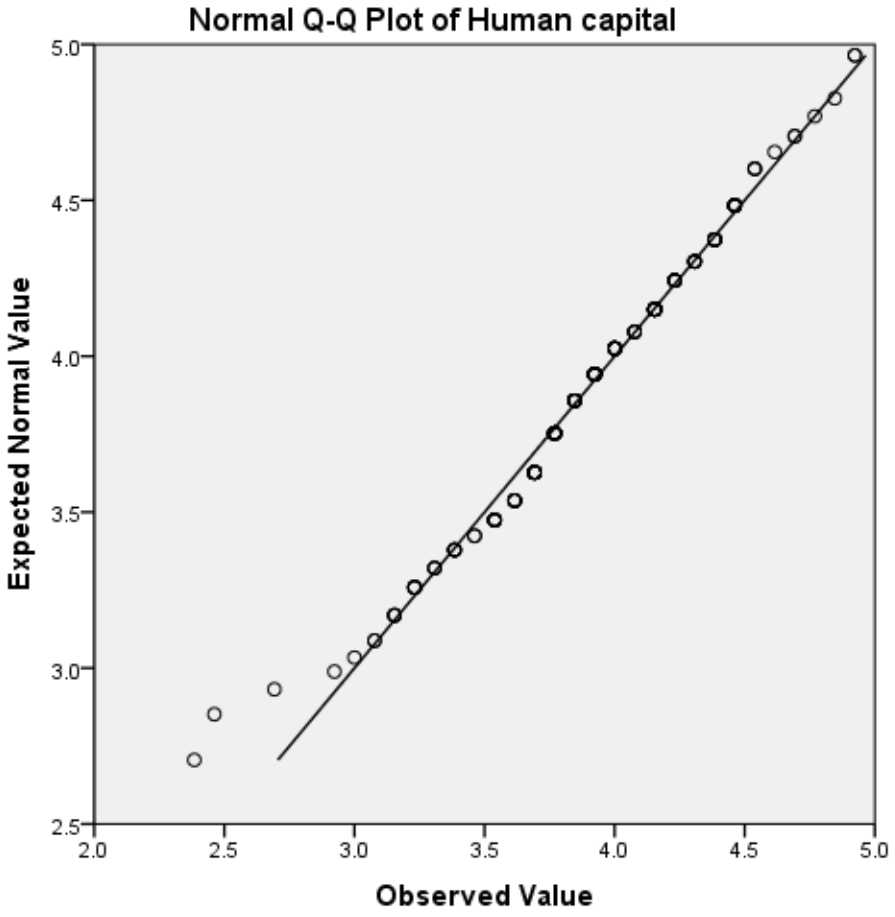

Figure 4.5: Normal Q-Q plot of Human capital

Figure 4.6 shows that observed value and expected normal value for the variable technological resource have come from a population with a normal distribution. The two distributions compared are identical, they appear to form close to 45 degrees line to show that Y=X. This implies that the data for the variable technological resource comes from a normal population.

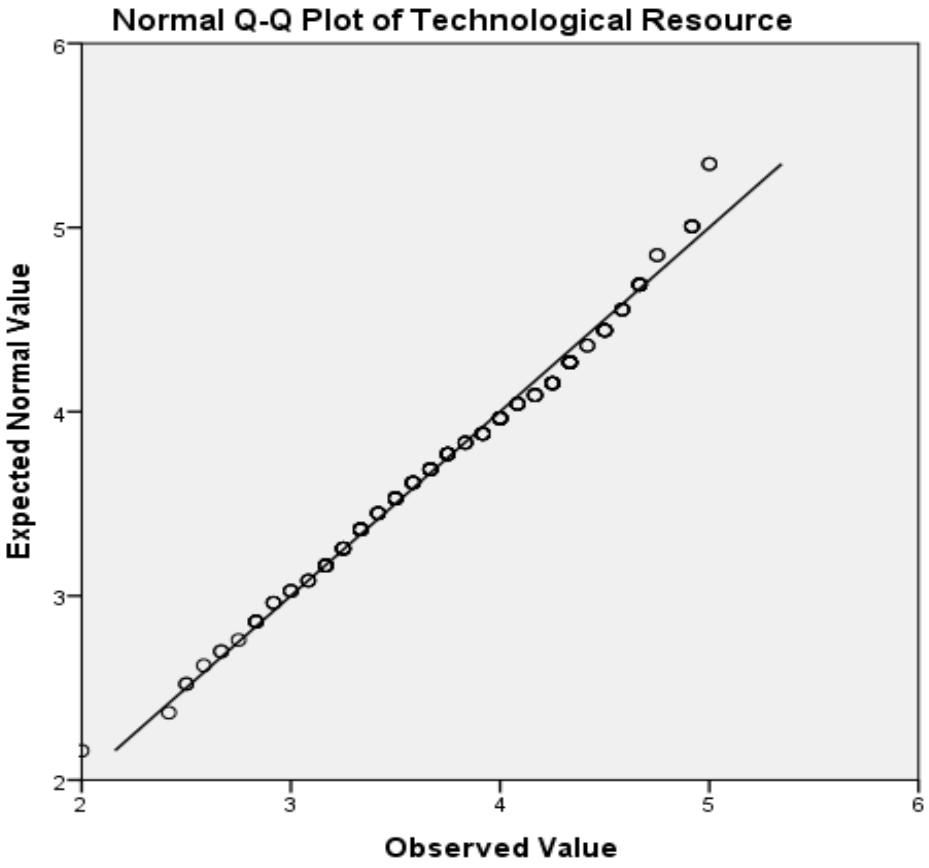

Figure 4.6: Normal Q-Q plot of Technological Resource

Figure 4.7 shows that observed value and expected normal value for the variable physical resource have come from a population with a normal distribution. The two distributions compared are close identical, they appear to form close to 45 degrees line to show that Y=X. This implies that the data for the variable physical resource comes from a normal population.

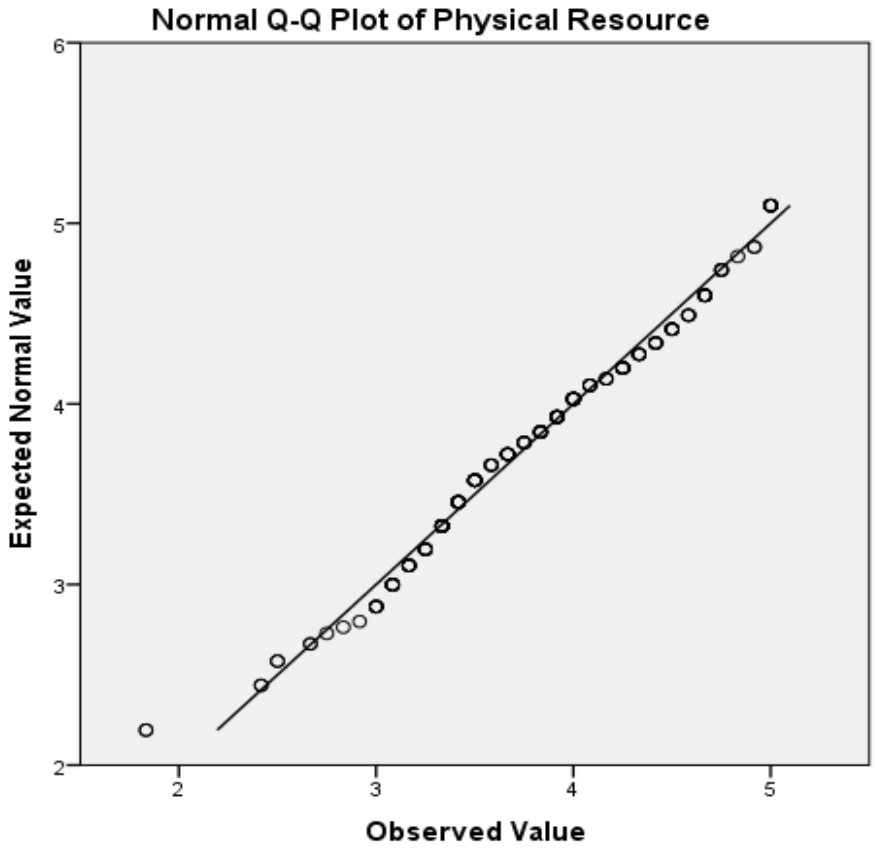

Figure 4.7: Normal Q-Q plot of Physical Resource

Figure 4.8 shows that observed value and expected normal value for the variable firm size have come from a population with a normal distribution. The two distributions compared are almost identical, they appear to form close to 45 degrees line to show that Y=X. This implies that the data for the variable firm size comes from a normal population.

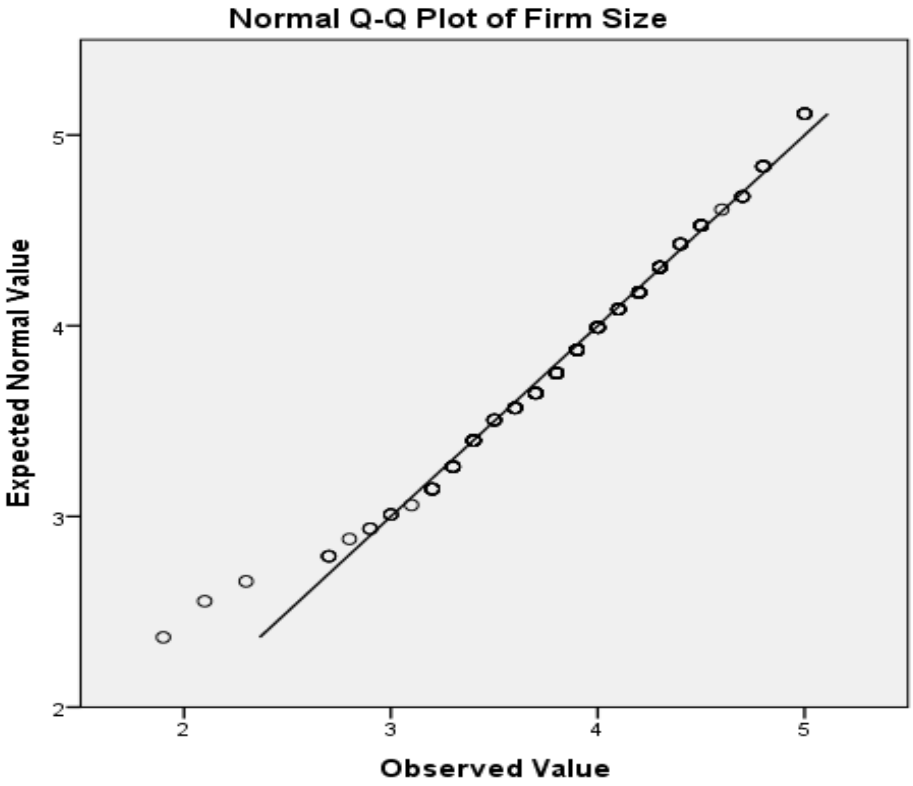

Figure 4.8: Normal Q-Q plot of Firm Size

4.5.3 Autocorrelation Test

Durbin–Watson statistic was used to test autocorrelation. Durbin–Watson statistic is a statistical technique used in determining the level of autocorrelation among residuals of a given regression analysis. The general principle in Durbin–Watson statistic is that values which range from 1.5 to 2.5 tend to indicate there is non- autocorrelation in a particular data. The value of Durbin–Watson statistic in this study was 1.869. Since the value is within the range of 1.5 to 2.5, it denotes that the data does not auto correlate. Therefore, there is no serial auto correlation in the data.

Table 4.5: Autocorrelation Test

Model	Durbin-Watson
1	1.869

4.5.4 Multi-collinearity Test

Multi-collinearity is used to determine the probability that independent variables (which are equal or more than 2) in a particular multivariate regression model are highly or significantly correlated. This would mean that one variable can be predicted from the other (Singpurwalla, 2013). In case the correlations among the independent variables are quite strong, the standard error of the coefficients tends to increase thus leading to undesirable events. The study adopted the use of Variance Inflation Factor (VIF) so as to measure the level of correlation among the variables. The general principle is that VIF which is greater than ten (10) tend to warrant further investigation. The VIF, as shown in Table 4.6, indicates that multicollinearity was absent among the independent variables, since the VIF values were below 6 which is the acceptable below which indicates absence of multicollinearity. Financial resource has a VIF of 1.316, human capital has a VIF of 1.623, technological resource has a VIF of 1.488 and physical resource has a VIF of 1.472. This implies that the independent variables are not highly correlated among themselves.

Table 4.6: Collinearity Statistics

	Tolerance	VIF
Financial Resource	.760	1.316
Human capital	.616	1.623
Technological Resource	.672	1.488
Physical Resource	.680	1.472

4.5.5 Heteroscedasticity and Homoscedasticity Test

Violation of homoscedasticity tends to inhibit critical evaluation of forecast errors of standard deviation, which often leads to confidence intervals which are extremely narrow or extremely wide. Heteroscedasticity in this study was calculated by the use of Breusch-Pagan test. The null hypothesis for this test was that the error variances were equal and were a multiple function of variables. Homoscedasticity normally occurs when the p-value is greater than the significance level (0.05) (Bryman & Cramer, 2012). With regard to the results presented in Table 4.7, the significance level (0.05) was less than the p-value (0.4404) hence there was no violation of the homoscedasticity principle in the data.

Table 4.7: Breusch-Pagan test for Heteroscedasticity

Ho: Constant variance	
Chi2 (1)	0.60
Prob>chi2	0.4404

4.5.6 Linearity Test

One of the other assumptions in regression analysis is that the predictor (independent) variables and predicted (dependent) variable relationships are linear in nature. Linear relationship tends to exist when the values of the dependent variable(Y) and the values of the independent variables (X) are apparently in a straight line when plotted on a graph. The line could be in a negative or positive slope. As shown in Figure 4.9, financial resource has positive linear relationship with deposit taking SACCOs in Kenya. The findings imply that increased financial resource leads to an increase in the performance of deposit taking SACCOs. The results further indicated that financial

resources could explain 13.1% of the performance of deposit taking SACCOs. The findings are in line with Njagi (2018) findings that financial resource in terms of ease of access to funds, adequate or inadequate funds, timeliness of the provision of financial resource, effective fund allocation and collaboration had a positive effect on performance. In addition, according to White, Maru and Boit (2015), financial resource had a positive significant correlation with firm performance.

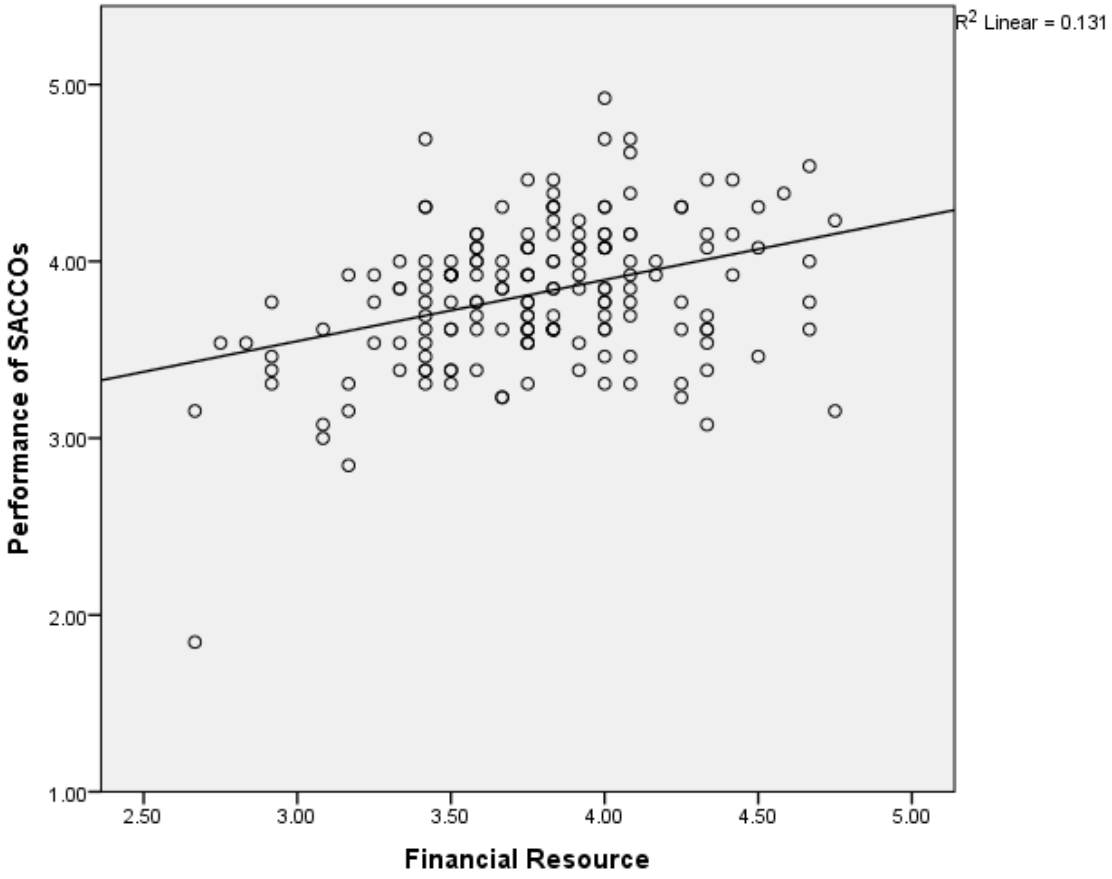

Figure 4.9: Scatter plot for Financial Resource and Performance of D.T. SACCOs

As shown in Figure 4.10, human capital has positive linear relationship with deposit taking SACCOs in Kenya. The findings imply that human capital leads to an increase in the performance of deposit taking SACCOs. The results further indicated that human capital could explain 19.0% of the deposit taking SACCOs in Kenya. These findings

concur with Shady (2011) findings that human capital influences satisfaction, job and career of staff members which are factors that affect the performance of an organization. Also, Chigozi and Onyia (2018) indicate that firms that do not invest in learning and do not take continuous development, learning, sharing, mobilization, distribution, cultivation and practicing, reviewing and spreading knowledge experience poor performance.

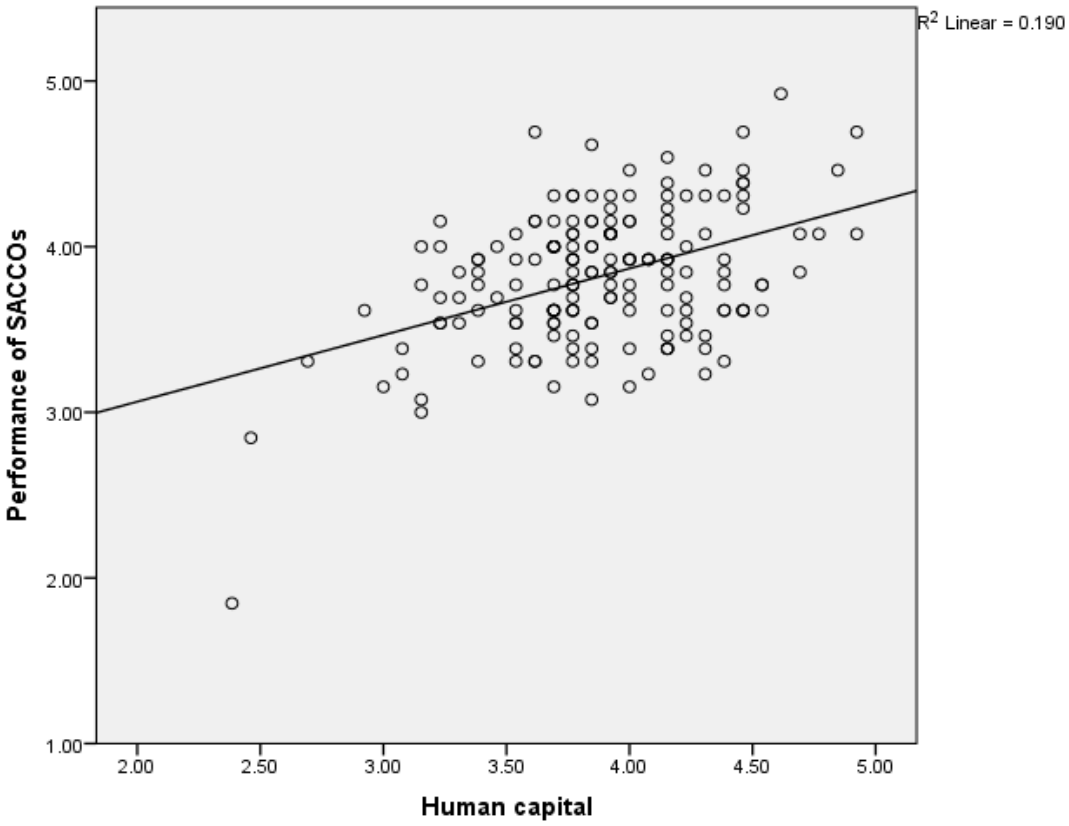

Figure 4.10: Scatter plot for Human Capital and Performance of D.T. SACCOs

From the result, as shown in D Figure 4.11, technological resource has positive linear relationship with deposit taking SACCOs in Kenya. The findings imply that technological resource leads to an increase in the performance of deposit taking SACCOs. The results further indicated that technological resource could explain 8.9% of the deposit taking SACCOs in Kenya. These findings are in line with Bustinza,

Vendrell-Herrero and Parry (2016) argument that there exists a positive and significant relationship between technological capabilities and organizational effectiveness and performance. Further, Reichert and Zawislak (2014) indicate that firms that did not invest in technology or those in the low technology intensity industries performed poorly when it came to economic performance.

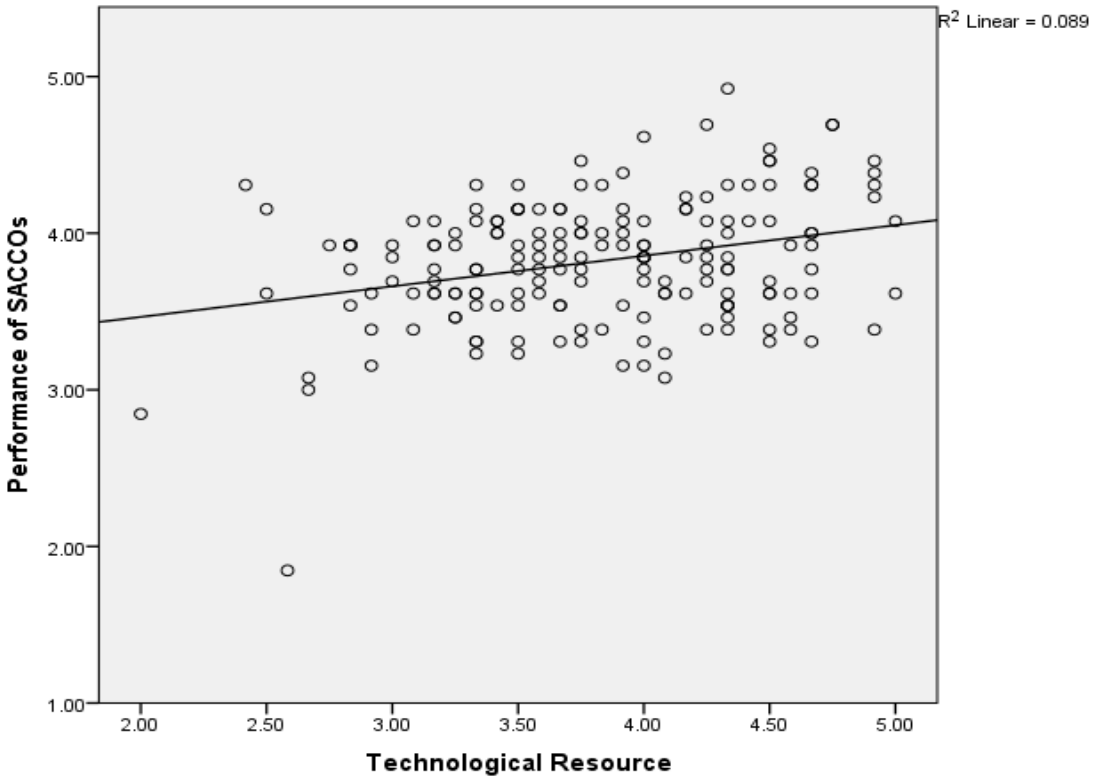

Figure 4.11: Scatter plot for Technological Resource and Performance of SACCOs

According to the results, as shown in Figure 4.12, physical resource has positive linear relationship with deposit taking SACCOs in Kenya. The findings imply that physical resource leads to an increase in the performance of deposit taking SACCOs. The results further indicated that physical resource could explain 15.6% of the deposit taking SACCOs in Kenya. The findings agree with Brackertz (2016) findings that there is a

significant positive correlation between physical facility and organizational performance. In addition, Bartocho (2016) indicated that those physical capital resource capabilities have a significant influence on employee performance. Physical capital resource capabilities therefore, such as the need for adequate stocks to service customer needs, offering services in firm's own buildings, ICT facilities for use by employees in serving customers, availability of electricity power in the offices, dependable fleet of vehicles for logistics efficiency and customer care facilities among others will facilitate employee performance in offering efficient service delivery.

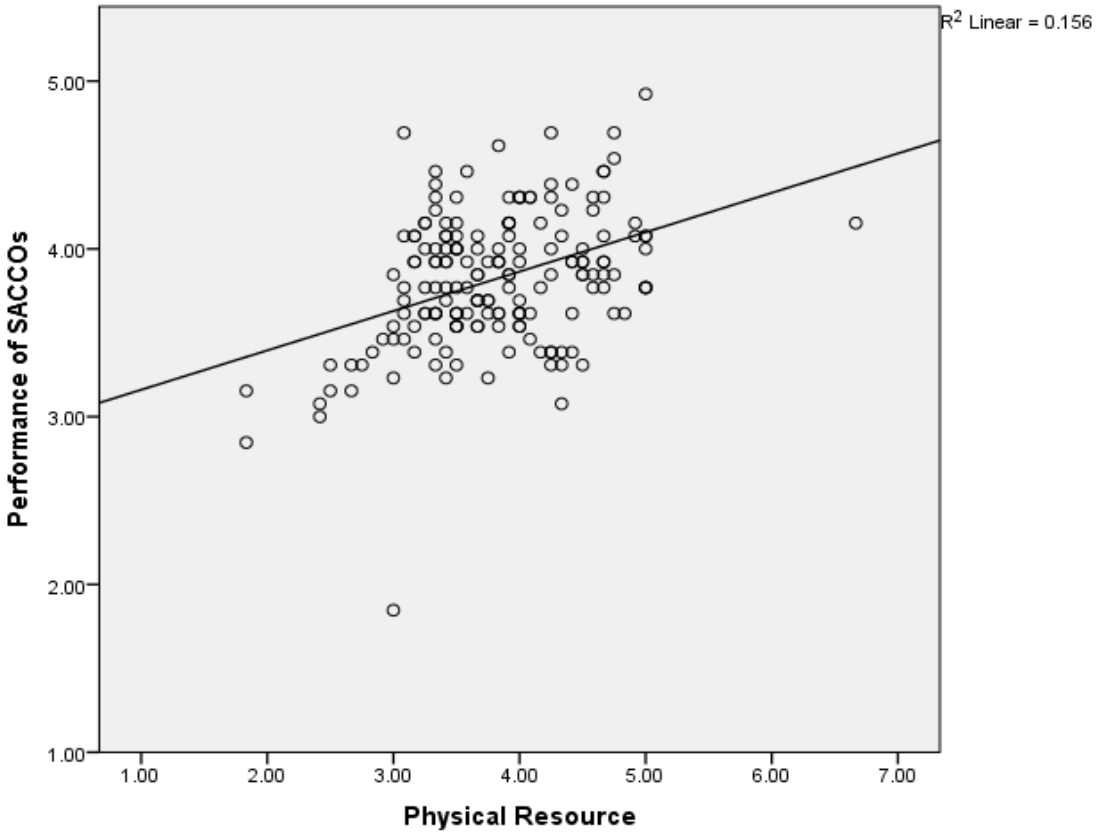

Figure 4.12: Scatter plot for Firm Size and Performance of SACCOs

4.6 Statistical Analysis

4.6.1 Performance of Savings and Credit Cooperative Societies

Organizational performance in Savings and Credit Co-operative organizations was measured in terms of number of members, total assets, customer satisfaction, dividends and profitability.

The staffs working at the deposit taking SACCOs were asked to indicate their level of agreement with various statements on the performance of their deposit taking SACCOs. The results were as presented in Table 4.8.

According to Li, Zhou and Tian (2018) business process perspective of organizational performance is measured using process innovation, efficiency, relationships, and convenience. From the findings, the staffs at deposit taking SACCOs strongly agreed with a mean of 4.522 (standard deviation (SD = 0.632) that their organizations offer reliable services. With a mean of 4.420 (SD = 0.736) the managers agreed that their organizations ensured the members got value for money. These findings are in line with Marwa and Aziakpono (2015) findings that one of the objectives of organizations like SACCOs is to ensure that the members get value for money. Further, the staff at deposit taking SACCOs agreed with a mean of 4.392 (SD = 0.650) that their organizations ensured that the services are responsive. In addition, the managers agreed with a mean of 4.204 and (SD = 0.695) that their organizations had the ability to deliver the promised service in a consistent and accurate manner. Moturi and Mbiwa (2015) argue that financial institutions have the ability to deliver the promised service in a consistent and accurate manner. The staff at deposit taking SACCOs were neutral on the statement indicating that the turnaround time in the organization is low as shown by a mean of 3.255 (SD = 1.179). According to Bakri (2017), efficiency is the use of organization resources in an economic manner to achieve a business goal or objective.

Additionally, the managers were neutral on the statement indicating that cost of service delivery is low as shown by a mean of 3.147 (SD = 1.237). Amoah-Mensah (2013) indicates that effectiveness is the achievement of results that relate to the objectives of the customer needs. Further, the managers were neutral on the statement indicating that the waiting time in service delivery is low as indicated by a mean of 2.744 (SD = 1.268). However, the staff at deposit taking SACCOs disagree with the statement indicating that delivery time in the organization was low as shown by a mean of 2.426 (SD= 1.211). This implies that delivery time in SACCOs was high meaning that most of the SACCOs had low efficiency.

Customer satisfaction entailed determining the number of clients who reported their experience when utilizing the firms' products and services. Customer satisfaction is a part of customers' experience that exposes a supplier's behavior on customers' expectation. Kogo and Kimencu (2018) indicate that customer perspective of organizational performance is measured using quality, speedy purchase and appropriate selection. According to the results, the staff at deposit taking SACCOs agreed with a mean of 4.403 (SD= 0.606) that their SACCOs ensure that customers were satisfied. With a mean of 4.221 and a 0.710 the staff at deposit taking SACCOs agreed that the process in service delivery was characterized by clarity and simplicity. Further, the managers agreed with a mean of 4.193 (SD= 0.690) that customers were satisfied with the services they received from their SACCO and with a mean of 3.926 (SD= 0.733) that customers show satisfaction with cost of service delivery. The managers also agreed with a mean of 3.801 (SD= 0.814) that customers are satisfied with the timeliness in service delivery. These findings agree with Black and Boal (2012) findings that institutions such as SACCOs should ensure customer satisfaction through ensuring efficiency and effectiveness in service delivery.

Table 4.8: Performance of Savings and Credit Cooperative Societies

Statement	SD %	D %	N %	A %	SA %	Mean	Standard Deviation
Cost of service delivery is low	14.2	18.2	43.2	15.3	9.1	3.147	1.237
Delivery time in the organization is low	24.4	38.1	14.8	15.9	6.8	2.426	1.211
The waiting time in service delivery is low	19.9	18.8	27.8	25.0	8.5	2.744	1.268
Our organization ensures the members gets value for money	1.1	1.1	4.5	40.9	52.3	4.420	.736
The turnaround time in the organization is low	11.4	12.5	28.4	34.7	13.1	3.255	1.179
The organization offers reliable services	.6	.6	2.3	39.2	57.4	4.522	.632
The organization ensures that the services are responsive	.0	2.3	2.3	49.4	46.0	4.392	.650
The organization has ability to deliver the promised service in a consistent and accurate manner	.6	1.1	9.1		33.5	4.204	.695
Our organization ensures that customers are satisfied	.0	.6	4.5	48.9	46.0	4.403	.606
Customers are satisfied with the services they receive from the organization	.0	1.1	12.5	52.3	34.1	4.193	.690
Customers are satisfied with the timeliness in service delivery	1.1	4.0	26.1	51.1	17.6	3.801	.814
Customers show satisfaction with cost of service delivery	.0	5.1	15.3	61.4	18.2	3.926	.733
The process in service delivery is characterized by clarity and simplicity	.6	2.8	4.5	58.0	34.1	4.221	.710

4.6.1.1.1 Challenges faced on Performance of Deposit Taking SACCOs

The managers were requested to indicate the challenges faced with reference to the performance of their deposit taking SACCOs. The results were as shown in Table 4.9. According to the findings, 11.4%% of the staff indicated that challenges facing the performance of deposit taking SACCOs included non-consultative changes in government policies (SASRA strict regulation); 9.1% specified stiff competition from mainstream financial institutions; 8.5% pointed out corruption and embezzlement of funds; 8.0% specified political interference; the same percentage indicated high cost of service delivery; 7.4% indicated default by members and cybercrime threats. In addition, 7.4% of the managers indicated that the SACCOs were facing other challenges such as low member savings and 6.8% specified weak leadership.

In addition, the managers indicated that the SACCOs were facing other challenges such as inadequate liquidity, inflation, high interest rates, and high demand for loans more than members can pay thereby increasing rate of defaulting; and regulators like KRA and SASRA were also overwhelming. The managers further indicated that the SACCOs were facing challenges such as lack of adequate internal generation of funds, high cost of external borrowing and high members' withdrawal as a result of retrenchments and increasingly high cost of products offered. The SACCOs were also experiencing high non-performing loans, poor saving culture by members as well as under capitalization.

Table 4.9: Challenges faced on Performance of Deposit Taking SACCOs

	Frequency	Percent
Non-consultative changes in government policies	20	11.4
Stiff competition from mainstream financial institutions	16	9.1
Corruption and embezzlement of funds	15	8.5
Political interference	14	8.0
High cost of service delivery	15	8.0
Default by members	13	7.4
Cybercrime threats	13	7.4
Low members' savings	12	6.8
Weak leadership	11	6.3
Inadequate liquidity	10	5.7
Inflation	10	5.7
High interest rates	9	5.1
High demand for loans more than members can pay	6	3.4
Laxity among regulators like KRA and SASRA	5	2.8
Lack of adequate internal generation of funds	3	1.7
High cost of external borrowing	2	1.1
High members' withdrawal as a result of retrenchments	2	1.1
Increasingly high cost of products offered	1	0.6
Total	**176**	**100**

4.6.1.1.2 Suggested Ways of Improving Performance of Deposit Taking SACCOs

The managers were asked to suggest ways of improving the performance of their deposit taking SACCOs. As shown in Table 4.10, 17.6% of the managers proposed that to improve performance, SACCOs needed to enhance financial management education to members, 15.3% specified educating members on the need to elect directors with

leadership skills, 13.6% indicated providing sufficient funds to improve liquidity and 11.4% specified need to have competitive products. Moreover, the staff indicated offering better customer service, ensure sufficient collateral to loans advanced to members, borrow funds from cheaper sources, and recruit more members as well as coming up with ways of innovative means of coping in the industry.

Other suggested ways that can be used to improve performance in deposit taking SACCOs included diversification of products and service, documenting processes and procedures, encourage members to deposit/ save more, sensitizing members to repay their loans within the timelines, and funds mobilization from other sources other than membership contribution. SACCOs can also improve their performance through higher liquidity, more sales of shares, and improvement of Know-Your-Customer (KYC) as a prerequisite to approving loans, marketing, low cost of delivery and customer satisfaction surveys.

Table 4.10: Ways of Improving Performance of Deposit Taking SACCOs

	Frequency	**Percent**
Enhance financial management education to members	31	17.6
Educating members on the need to elect directors with leadership skills	27	15.3
Provide sufficient funds to improve liquidity	24	13.6
Have competitive products	20	11.4
Offer better customer service	18	10.2
Ensure sufficient collateral to loans advanced to members	17	9.7
Borrow funds from cheaper sources	15	8.5
Recruit more members	13	7.4
Coming up with ways of innovative means of coping in the industry	11	6.3
Total	**176**	**100**

4.6.1.1.3 Financial Performance of SACCOs

From the annual reports of Sacco Societies Regulatory Authority (SASRA), data on total assets, total income, liquidity ratio, number of members and return on assets were obtained for the years between 2012 and 2017 for the entire deposit- taking SACCOs sampled.

As illustrated in Figure 4.13, the total net income in the deposit taking SACCOs in Kenya had been increasing exponentially over the years. In the year 2012, total net income was Kshs. 2,774 million, which increased to Kshs. 5,457 million in 2013, Kshs. 7,071 million in 2014, Kshs. 8,194 million in 2015, Kshs. 8,868 million in 2016 and Kshs. 11,999 million in 2017. These findings agree with Muriuki (2016) findings that total net income in deposit taking SACCOs had been increasing over the years.

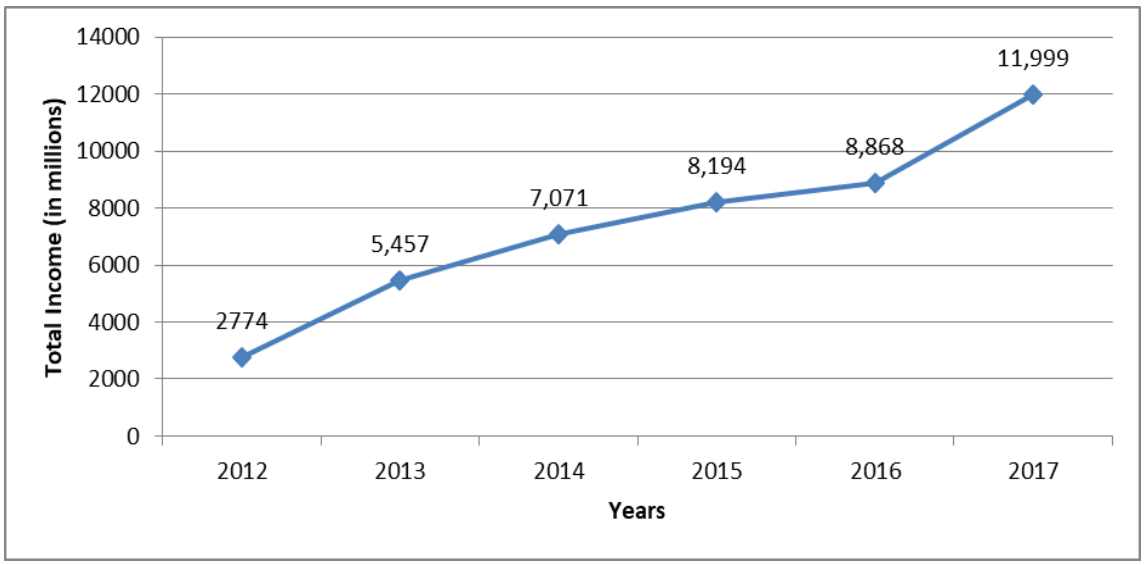

Figure 4.13: SACCOs' Total Net Income (2012-2017)

According to the results shown in Figure 4.14, total assets in the deposit taking SACCOs were worth Kshs. 293.46 million in 2012, decreased to Ksh. 257.36 million in 2013. In the year 2014, the total assets in deposit taking SACCOs were Ksh. 301.85 million, which increased to Ksh. 342.85 million in 2015, Ksh. 393.49 million in 2016 and Ksh.

442.28 million in 2017. These findings imply that the total assets in deposit taking SACCOs in Kenya have generally been increasing. These findings are in line with Karagu and Okibo (2014) where results found that total assets in deposit taking SACCOs in Kenya had been increasing over the years.

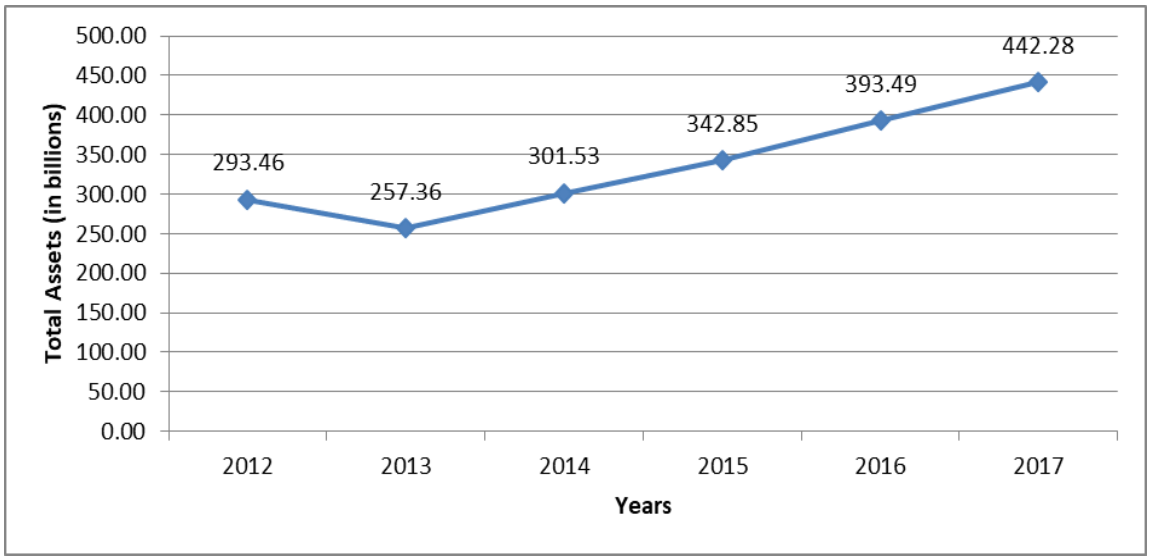

Figure 4.14: SACCOs' Total Assets (2012-2017)

Liquidity ratio is the ratio of current liabilities to current assets. This indicates the ability of an organization to meet its obligations arising in the short term of under 12 months. The results in Figure 4.15 show that liquidity ratio of deposit taking SACCOs in Kenya has been fluctuating for the last six years (2012-2017). In the year 2012, liquidity ratio among deposit taking SACCOs was 61.39, which decreased to 36.40 in 2013 before increasing to 47.32. In the year 2015 liquidity ratio among deposit taking SACCOs was 55.90, which decreased to 49.95 in 2016 and 54.10 in 2017. The findings imply that liquidity ratio among deposit taking SACCOS in Kenya had been fluctuating.

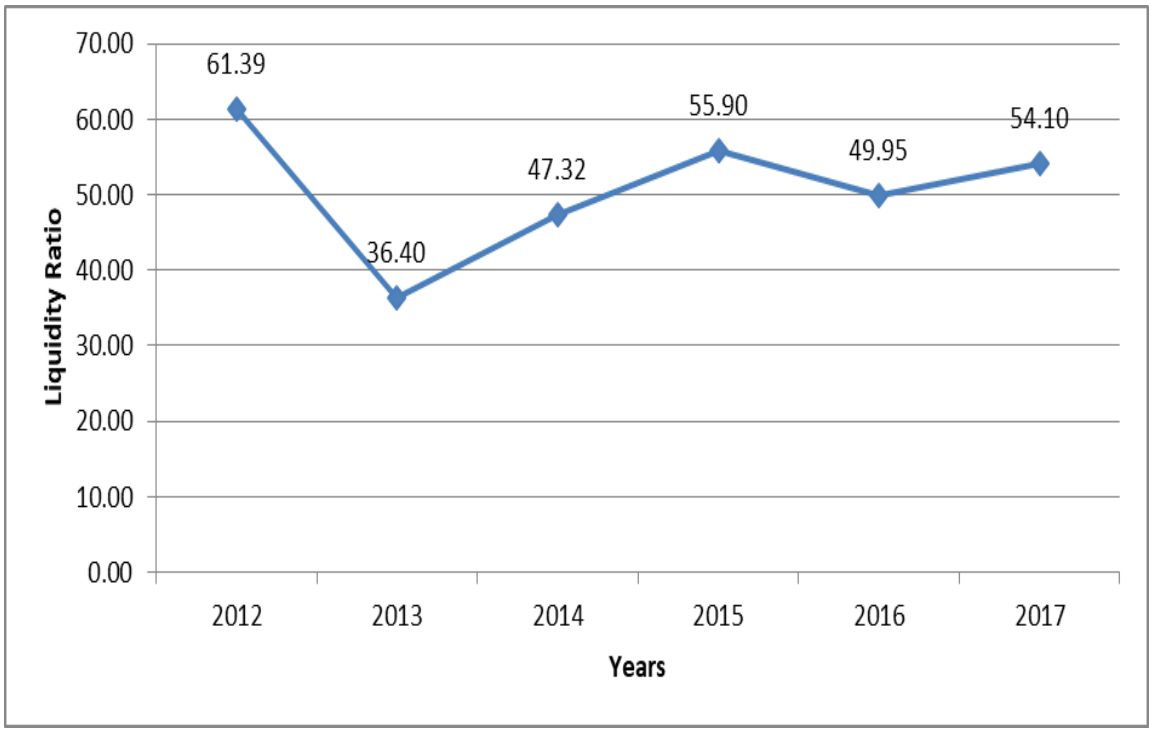

Figure 4.15: SACCOs' Liquidity Ratio (2012-2017)

According to the results as shown in Figure 4.16, deposit taking SACCOs in Kenya had 2,968,688 members in 2012. In the year 2013, this number decreased to 2,609,300 before increasing to 3,008,497 in 2014, 3,145,565 in 2015 and 3,632,597 in 2016. In the year 2017, the number of members in deposit taking SACCOs decreased to 3,599,200. These findings imply that during the period ranging from 2012 to 2017, the number of members in deposit taking SACCOs had an increase.

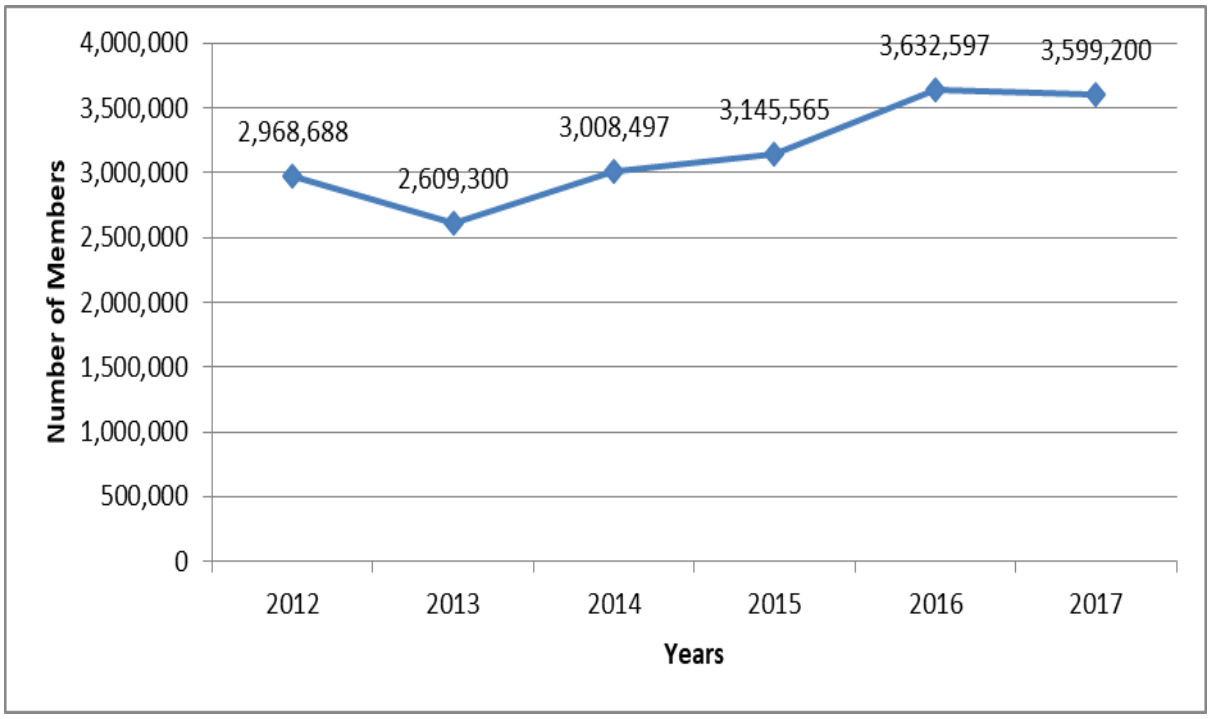

Figure 4.16: SACCOs' Number of Members (2012-2017)

According to the results, return on assets (ROA) in the year 2012 was 2.02%, which increased to 2.32% in 2013 and 2.56% in 2014. Between the year 2014 and 2015, return on assets decreased to 2.56% and 1.89%. In the year 2016 return on assets increased to 2.45%, which increased again to 2.69% in 2017. While there were some fluctuations in the return on assets in deposit taking SACCOs, there was a general increase for the period ranging from 2012 to 2017. These findings are in line with Kharazmi and Teymouri (2013) findings that despite the increase in nonperforming loans, the profitability of deposit taking SACCOs in terms of return on assets had been fluctuating.

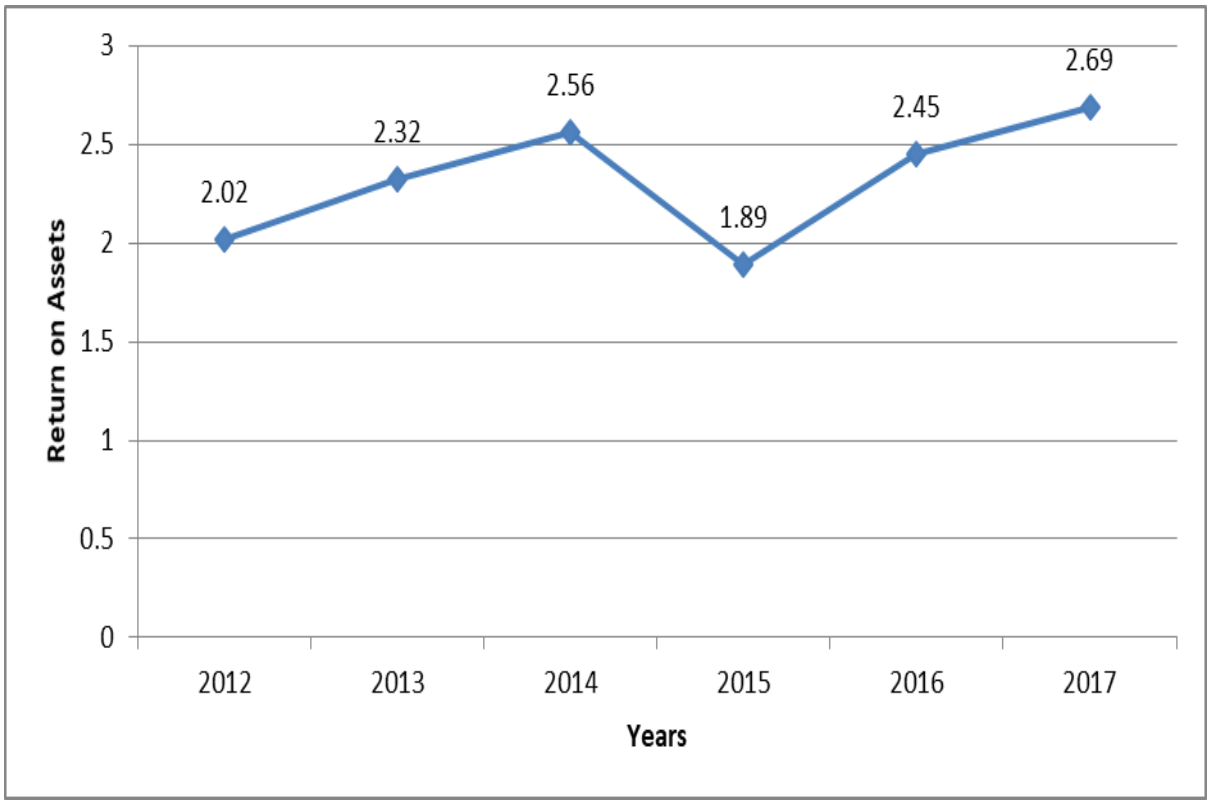

Figure 4.17: SACCOs' Return on Assets (2012-2017)

4.6.2 Financial Resources and Performance of SACCOs

Financial resource is a scarce, basic and valuable resource that is often used to get other resources including buying advertising space, purchasing equipment and paying staff. As indicated by Maithya (2016), financial resource helps to fund the strategies of the enterprise and also fund the expansion of the operations of the firm. The first objective of the study is to assess how financial resource affects the deposit taking SACCOs in Kenya.

4.6.2.1 Descriptive Analysis

4.6.2.1.1 Aspects of Financial Resources

The managers at deposit taking SACCOs were requested to specify their agreement levels on various statements on financial resources in their deposit taking SACCO. The results were as presented in Table 4.11. According to the findings; the managers agreed with a mean of 4.568 (SD = 0.818) that the main source of funds in their SACCO was members' contributions. The managers were neutral on the statement that SACCOs are financed by sale of share as shown by a mean of 3.420 (SD= 1.407). These findings agree with Bamel and Bamel (2018) findings that all SACCOs mainly use two sources of financing: members' deposits and debt. The use of these two sources, in one way or another, influences adequacy of funds and timely release of finances, which affects organizational performance. The managers were also neutral on the statement that the SACCOs combine both borrowed funds and members contributions as shown by a mean of 2.630 (SD= 1.271). The managers disagreed with the statement that SACCOs annually borrow external funds to lend to members as shown by a mean of 2.340 (SD= 1.174).

Kharazmi and Teymouri (2013) indicate that adequate funding is a necessity to provide an organization with the ability to run their administrative and technical operations successfully which will see the firm meet its objectives. The managers agreed with a mean of 4.204 (SD=0.670) that their SACCOs have enough financial resources to cater for repairing and maintaining physical assets such as office equipment. These findings are in line with Fonseka, Tian and Li (2014) emphasis of adequate financial resources in organization for use in priority investments that are able to enhance the firm performance.

The managers further agreed with a mean of 3.965 (SD = 0.906) that their SACCOs have adequate funds to remunerate staff. In addition, the managers agreed with a mean of 3.835 (SD= 0.986) that there are always available funds in their SACCOs to finance

different activities. Also, the managers agreed with a mean of 3.545 (SD= 0.972) that the SACCOs have adequate funds to buy physical assets. These findings concur with Abdulrahman and Bamiduro (2018) findings that adequate funding is a necessity to provide an organization with the ability to run their administrative and technical operations successfully which will see the firm meet its objectives. These findings are also in line with Adomako and Danso (2014), findings that availability, accessibility and adequacy of funds gives an organization competitive advantage in service delivery.

Timely release of funds is another important component of financial resources. The managers also agreed with a mean of 4.392 (SD = 0.623) that timely release of funds influences service delivery and operations in the SACCOs. The managers further agreed with a mean of 4.215 (SD = 0.691) that the chief accountant and the finance department ensure that funds are released in a timely manner. Further, the managers agreed with a mean of 4.204 (SD = 0.795) that their SACCOs prepare a monthly expenditure plan so as to ensure timely release of fund. The managers agreed with a mean of 4.056 (SD = 0.768) that the management of the SACCOs ensure timely release of funds to different departments. These findings concur with Adomako and Danso (2014) findings that the provision of financial resources at the right time is critical to the organizational success. In addition, Kharazmi and Teymouri (2013) indicate that financial management practices ensuring adequate funds and timely release of funds have a positive effect on organizational performance.

Table 4.11: Aspects of Financial Resources

Statement	SD %	D %	N %	A %	SA %	Mean	Standard Deviation
The main source of funds in our SACCO is members contributions	.6	5.1	2.3	21.0	71.0	4.568	.818
Our SACCO annually borrows external funds to lend to members	29.0	30.7	18.2	19.9	2.3	2.340	1.174
Our SACCO combines both borrowed funds and members contributions	24.4	27.3	14.2	29.0	5.1	2.630	1.271
Our SACCO is financed by sale of share	14.8	16.5	6.3	36.9	25.6	3.420	1.407
There are always available funds in the SACCO to finance different activities	2.8	9.7	11.9	52.3	23.3	3.835	.986
The SACCO has adequate funds to buy physical assets	2.8	10.8	30.7	40.3	15.3	3.545	.972
The SACCO has adequate funds to remunerate staff	4.0	2.3	11.9	56.8	25.0	3.965	.906
The SACCO has enough financial resources to cater for repairing and maintaining physical assets such as office stationeries	.0	2.3	7.4	58.0	32.4	4.204	.670
The management of the SACCO ensures timely release of funds to different departments	1.1	1.7	14.8	55.1	27.3	4.056	.768
The chief accountant and the finance department ensure that funds are released in a timely manner	.6	1.1	8.5	55.7	34.1	4.215	.691
Timely release of funds influences service delivery and operations in the SACCOS	.0	.6	5.7	47.7	46.0	4.392	.623
Our SACCO prepares a monthly expenditure plan so as to ensure timely release of fund	.6	4.0	8.0	49.4	38.1	4.204	.795

4.6.2.1.2 Challenges Faced on Financial Resources in the Deposit Taking SACCOs

The managers were asked to indicate the challenges faced with reference to financial resources in their deposit taking SACCOs. According to the results, 9.1% of the staff indicate high expense is a challenge faced with reference to financial resources in the deposit taking SACCOs, 8.5% specified high expenses, 7.4% pointed out lack of adequate funds and 6.8% specified inaccessibility to external funds. Moreover, they indicated that other challenges include: long budget approval process, lack of investment policy, poor debt collection strategies, low interest rates, money laundering, delay by employers in remitting deductions, delay in loans approval due to long process, delay in loan disbursement, poor saving culture, and failure of some members to repay loans. The managers also indicated that to advance cheap loans the SACCOs must borrow at 2%, which was often very hard to get. The study also found that there were high costs of running the SACCOs, high tax rates and inadequate funds to expand. Other challenges included high interest rates on loans, poor loan recovery, and illiquidity of some assets.

Table 4.12: Challenges Faced on Financial Resources in the Deposit Taking SACCOs

	Frequency	Percent
High expenses	16	9.1
Lack of adequate funds	15	8.5
inaccessibility to external funds	13	7.4
Long budget approval process	12	6.8
Lack of investment policy	11	6.3
Poor debt collection strategies	10	5.7
Low interest rates	9	5.1
Money laundering	8	4.5
Delay by employers in remitting deductions	8	4.5
Delay in loans approval due to long process	8	4.5
Delay in loan disbursement	8	4.5
Poor saving culture	8	4.5
Failure of some members to repay loans.	8	4.5
Difficulty in getting a cheap loan	7	4.0
High costs of running the SACCOs	7	4.0
High tax rates	6	3.4
Inadequate funds to expand	5	2.8
High interest rates on loans	4	2.3
Poor loan recovery	3	1.7
Illiquidity of some assets	2	1.1
Inadequate funds to purchase physical assets	2	1.1
High demand for loans	1	0.6
loan defaults affecting liquidity	1	0.6
Poor financial records	1	0.6
Financial fraud including bounced cheques	1	0.6
Total	**176**	**100.0**

4.6.2.1.3 Suggested Ways of Improving Financial Resources in Deposit Taking SACCOs

The managers were requested to suggest ways of improving financial resource allocation in their deposit taking SACCOs. According to the results, 10.2% of the managers suggested that the SACCOs should come up with ways of loan recovery and reduce interest rates, 8.0% indicated development of attractive investment projects with good returns, 7.4% specified improvement on liquidity and obtaining off-shore financing and 6.8% specified careful planning to curb liquidity problems and budgeting for loans demand by members to improve cash flows. In addition, SACCOs should have a bigger budget to cater for all necessary expenses and prioritize on budget allocation. Other respondents decried the small sizes of some deposit-taking SACCOs and suggested mechanisms should be worked where mergers could be suggested and facilitated.

Further, SACCOs should obtain adequate collateral to loans advanced to members to help reduce loan delinquencies. SACCOs should continue applying budgeting, cash flow projections and cost benefit analysis in all financial management matters. In addition, the managers suggested collection and follow up from the concerned parties on delays in remittances and encourage the members and customers to increase their savings and increase ways of accessing and accumulating funds. SACCOs should also focus on diversification of revenue sources and due diligence before making credit decisions

The managers also recommended external borrowing and the need to get other sources of financing apart from member contributions and to establish high minimum member monthly contributions. The managers further suggested that SACCOs should invest excess funds in income generating activities such as money markets and adhere to budgeting and minimizing expenditure. In addition, SACCOs should focus on mobilizing more long term funds, promote and encourage a saving culture among members and tap into regular income investment market. Further SACCOs should focus on rebranding and engaging in the micro-credit methods, while at the same time reducing cost of loan processing. Some respondents suggested reduction of interest rates

to offer incentives to borrowers. SACCOs should also improve financial reporting quality by adoption of international financial reporting standards and best practices.

Table 4.13: Ways of Improving Financial Resources in Deposit Taking SACCOs

	Frequency	**Percent**
Loan recovery	18	10.2
Reduce interest rates	14	8.0
Develop attractive investment projects with good returns	13	7.4
Improve on liquidity and obtain off-shore financing	13	7.4
Careful planning to curb liquidity problems	12	6.8
Budgeting for loans demand by members	10	5.7
Prioritize on budget allocation	10	5.7
Adequate collateral to loans advanced to members to help reduce loan delinquencies	10	5.7
Applying budgeting, cash flow projections and cost benefit analysis	9	5.1
Collection and follow up from the concerned parties on delays in remittances	9	5.1
Encourage the members and customers to increase their savings	9	5.1
Increase ways of accessing and accumulating funds.	8	4.5
Diversification of revenue sources	8	4.5
Due diligence before making credit decisions	6	3.4
External borrowing	5	2.8
Invest excess funds in income generating activities	4	2.3
mobilizing more long term funds	4	2.3
Promote and encourage a saving culture among members	4	2.3
Tap into regular income investment market	3	1.7
Rebranding and engaging in the micro-credit methods	3	1.7
Reducing cost of loan processing	2	1.1
Reduction of interest rates to offer incentives to borrowers	1	0.6
Adoption of international financial reporting standards and best practices	1	0.6
TOTAL	**176**	**100.0**

4.6.2.2 Correlation Analysis

From the findings there is a positive correlation between financial resources and performance of deposit taking SACCOs in Kenya(r=0.362, p-value=0.000). These findings agree with Akhavana and Eslamifara (2015) findings that financial allocation has a significant effect on organizational performance. Fonseka, Tian and Li (2014) also found that financial capability has a significant impact on the firms' competitiveness. This is because a company should have enough financial resources to run operations and to ensure sustainability and success. In addition, money is obviously critical in running the operations of a firm and is necessary for the hiring of the staff and for conducting the technical analyses and the monitoring of compliance. However, according to Adomako and Danso (2014) availability of funds is not the only important aspect of financial resources. Accessibility and adequacy of funds also gives an organization competitive advantage in service delivery.

Table 4.14: Correlation Coefficients for Financial Resources and Performance of SACCOs

		Performance of SACCOs	**Financial Resources**
Performance of SACCOs	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	176	
Financial Resource	Pearson Correlation	.362**	1
	Sig. (2-tailed)	.000	
	N	176	176

4.6.2.3 Regression Analysis

A univariate analysis was conducted to investigate the effect of financial resource on performance of deposit taking SACCOs in Kenya. The null hypothesis stated:

$H_0$1: Financial resources have no significant effect on performance of deposit taking SACCOs in Kenya

The r-squared tends to depict the variation in the dependent variable that can be explained by the independent variables: the greater the value of r-squared the greater the effect of independent variable. The r-squared can range from 0.000 to 1.000, with 1.000 showing a perfect fit that indicates that each point is on the line. As indicated in Table 4.15, the r-squared for the relationship between financial resources and performance of deposit taking SACCOs in Kenya was 0.131. This shows that financial resources can explain 13.1% of the deposit taking SACCOs in Kenya. This implies that 86.9% of the performance of deposit taking SACCOs in Kenya is accounted for by other factors not considered in the model.

Table 4.15: Model Summary for Financial Resources and Performance of D.T. SACCOs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.362[a]	.131	.126	.37588

a. Predictors: (Constant), Financial Resource

The analysis of variance is used to determine whether the regression model is a good fit for the data. It also gives the F-test statistic; the linear regression's F-test has the null hypothesis that there is no linear relationship between the two variables. As shown in Table 4.16, the F-calculated (26.166) was greater than the F-critical (3.84) and the p-value (0.000) was less than the significance level (0.05), which implies that the model is a good fit for the data and hence can be used to predict the effect of financial resources on the deposit taking SACCOs in Kenya.

Table 4.16: ANOVA for Financial Resources and Performance of DT SACCOs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.697	1	3.697	26.166	.000[b]
	Residual	24.584	174	.141		
	Total	28.281	175			

a. Dependent Variable: Performance of SACCOs

b. Predictor: (Constant), Financial Resource

The coefficients or beta weights for each variable allows the researcher to compare the relative importance of each independent variable. In this study the unstandardized coefficients and standardized coefficients are given for the multiple regression equations. However discussions are based on the unstandardized coefficients.

From the results the regression model was;

$$Y = 2.508 + 0.347X_1$$

The findings, as depicted in Table 4.17, show that the performance of deposit taking SACCOs in Kenya will be having an in index of 2.508 when financial resources is held constant. In addition, the Beta coefficient was 0.347 for the relationship between financial resources and the deposit taking SACCOs in Kenya. This shows that a unit improvement in financial resources would lead to a 0.347 improvement in the deposit taking SACCOs in Kenya. The relationship is significant as the p-value (0.000) was less than the significance level (0.05). Therefore we can reject the null hypothesis that "Financial resources have no significant effect on performance of deposit taking SACCOs in Kenya". These findings agree with Abdulrahman and Bamiduro (2018) findings that financial resources allocation has a positive effect on organizational effectiveness and performance. The findings also concur with Njagi (2018) findings that financial resources have a positive effect on performance of public health institutions in Embu County. Financial resources help to fund the strategies of the enterprise and also

fund the expansion of the operations of the SACCOs. Therefore, for a SACCO, to get the best return, financial resources should be used in priority investments that are able to enhance the firm performance. Further, adequate funding is a necessity to provide SACCOs with the ability to run their administrative and business operations successfully which will see the firm meet its objectives.

Table 4.17: Regression Coefficients for Financial Resources and Performance of DT SACCOs

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.508	.258		9.723	.000
	Financial Resource	.347	.068	.362	5.115	.000

a. Dependent Variable: Performance of SACCOs

4.6.3 Human Capital and Performance of SACCOs

Human capital as a resource involves employment, education and industrial experiences possessed by employees, among other experiences that allow the business owners deal with the challenges of a dynamic business environment. If management of human resources is done effectively, then the motivation and productivity of the workers rises and enables the firm create more value (Masaba & Kilika, 2016). Some of the aspects of human resources noted in literature review include skills, knowhow and experience levels (Shady, 2011).The second specific objective of the current research was to determine how human capital affects the performance of deposit taking SACCOs in Kenya.

4.6.3.1 Descriptive Analysis

4.6.3.1.1 Aspects of Human Capital

The managers were asked to indicate the level of agreement with various statements on human capital in their deposit taking SACCO. The results were as presented in Table 4.18. According to Nyabuti, Chepkilot and Zakayo (2016) if there are gaps and unavailability of human capital resources then the business can face problems when it tries to develop and launch new products, hire workers or even develop. From the findings, the managers agreed with a mean of 3.750 (SD = 0.838) that their SACCOs match the numbers of staff with the available workload. With a mean of 3.721 (SD = 0.892) the managers agreed that there were enough staff in each of the departments in their organizations. These findings agree with Rotich (2016) findings that there was a positive and significant relationship between sustainable competitive advantage of the firm and adequacy of the firm's human resource. Also, with a mean of 3.556 (SD=1.001) the managers agreed that their organizations have low employee turnover. The managers were neutral on the statement that their organizations have been increasing the number of staff every year as shown by a mean of 3.375 (SD = 1.050).

Nyabuti, Chepkilot and Zakayo (2016) argue that human capital resource involve, education and industrial skills possessed by employees. According to the findings, the managers agreed with a mean of 4.250 (SD= 0.580) that staff in their organization have the knowledge required in the assessment of members' credit worthiness. The managers also agreed with a mean of 4.181 (SD = 0.685) that staff in their organizations have the technical knowledge required in management of members' funds. These findings are in line with Yen (2013) findings that human capital elements such as skills, knowledge and abilities have an effect on employee performance and productivity, which in turn affects performance. Chigozi and Onyia (2018) revealed that any firm that does not invest in learning and does not take continuous development and spreading knowledge cannot compete well in the dynamic business markets.

The managers also agreed with a mean of 4.159 (SD = 0.715) that staffs in their organizations are excellent in communication. According to Preko (2014) effective communication is a key component in the general organizational performance. Further, the managers agreed with a mean of 4.017 (SD = 0.871) that their organizations had training programmes to increase staff knowledge. Additionally, they agreed with a mean of 3.971 (SD = 0.712) that staffs in their organizations are excellent in problem solving and decision making. These findings agree with Meichang, Wenzhong and Dan (2017) findings that if the firm is to successfully meet its objectives it needs to have human resources that are proficient in their tasks and internal systems that are efficient.

According to Shady (2011), some of the valuable aspects of human resource noted in literature include skills, knowhow and experience levels. The managers agreed with a mean of 4.056 (SD= 0.673) that all employees are always focused in achieving the set organization goals. In addition, the managers agreed with a mean of 4.034 (SD = 0.675) that all staff in their organization have experience in their specific departments. Also, the managers agreed with a mean of 3.823 and (SD = 0.746) that all staff in their organizations put physical effort in their work. Further, the managers agreed with a mean of 3.534 (SD= 0.925) that their organizations recruit staffs who have been working in their specific areas for a long duration of time.

Table 4.18: Human Capital

Statement	SD %	D %	N %	A %	SA %	Mean	Standard Deviation
There are enough staff in each of the departments in our organization	1.1	13.1	11.4	61.4	13.1	3.721	.892
Our organization has low employee turnover	3.4	9.7	32.4	36.9	17.6	3.556	1.001
Our organization has been increasing the number of staff every year	4.5	19.3	20.5	45.5	10.2	3.375	1.050
Our SACCO match the numbers of staff depending on the available workload	2.3	6.8	16.5	62.5	11.9	3.750	.838
Staff in the organization have the technical knowledge required in management of members' funds	.6	1.1	9.1	58.0	31.3	4.181	.685
Staff in the organization have the knowledge required in the assessment of members' credit worthiness	.0		7.4	60.2	32.4	4.250	.580
Staff in the organization are excellent in communication	.0	2.3	11.9	53.4	32.4	4.159	.715
Staff in the organization are excellent in problem solving and decision making	.0	1.7	21.6	54.5	22.2	3.971	.712
Our organization has training programmes to increase staff knowledge	1.7	2.8	18.2	46.6	30.7	4.017	.871
Our organization recruits staff who have been working in specific areas for a long duration of time	2.8	9.7	30.7	44.9	11.9	3.534	.925
All staff in our organization have experience in their specific departments	.0	1.1	17.6	58.0	23.3	4.034	.675
All employees are always focus in achieving the set organization goals	.6	.6	14.8	60.8	23.3	4.056	.673
All staff in our organization put physical effort in their work	1.7	2.8	19.3	63.6	12.5	3.823	.746

4.6.3.1.2 Challenges Faced on Human Capital in the Deposit Taking SACCOs

The managers were requested to indicate challenges they faced with reference to human capital in their respective deposit taking SACCOs. As shown in Table 4.19, 8.5% of the managers indicated that one challenge related to human capital in deposit taking SACCOs was lack of morale, 8.0% specified aging staff and 7.4% specified skill gaps in career progression. Masaba and Kilika (2016) had earlier indicated that if the management of the human resources is done effectively, then the motivation and productivity of the workers rises which sees the firm create more value. In addition, the managers reported that cultural beliefs had a negative effect on employee performance and staff sometimes had bad influence on one another. Another challenge was the high cost of training of staff and unavailability of flexible workforce. Maithya (2016) argues that a firm should continuously train and develop its employees to enable them cope with environmental changes and reduce resistance to change.

The SACCOs also had challenges of few staff compared to workload (inadequate human resource), high employee (labor) turnover, and low staff remuneration. The managers also reported staff underperformance, nepotism, poor communication skills, lack of training programmes, resistance to change and low adoption of technology low staff motivation, inconsistent performance appraisals and poor remuneration. The SACCOs were also experiencing fluctuating work load depending on the time of the month and some organizations were under staffed. Further, some SACCOs lacked human resource departments to manage staff matters and other human resource management issues including remuneration and motivation. The SACCOs were experiencing internal politics amongst staff members, lack of promotion and promotion policies, lack of technical knowledge to manage members' funds, as well as lack of enough skills trained and experience staff.

Table 4.19: Challenges Faced on Human Capital in the Deposit Taking SACCOs

	Frequency	Percent
Lack of morale	15	8.5
Aging staff	14	8.0
Skill gap in career progression	13	7.4
Cultural beliefs	13	7.4
High cost of training of staff	12	6.8
Unavailability of flexible workforce	10	5.7
Few staff compared to workload	10	5.7
Turnover	10	5.7
Low staff remuneration	9	5.1
Staff underperformance	9	5.1
Nepotism	9	5.1
Poor communication skills	8	4.5
Lack of training programmes	8	4.5
Resistance to change	6	3.4
Low adoption of technology	5	2.8
Low staff motivation	3	1.7
Inconsistent performance appraisals	3	1.7
Poor remuneration	3	1.7
Fluctuating work load	3	1.7
Lack of human resource departments to manage staff matter	3	1.7
Human resource management issues i.e. remuneration	2	1.1
Internal politics amongst staff members	2	1.1
Lack of promotion and promotion policies	2	1.1
Lack of technical knowledge to manage members' funds	2	1.1
Lack of enough skills trained and experience staff	2	1.1
	176	100.0

4.6.3.1.3 Suggested Ways of Improving Human Capital in Deposit Taking SACCOs

The managers were requested to suggest ways of improving human capital in their deposit taking SACCOs. The results were as shown in Table 4.20. According to the results, 13.6% of the managers recommended that SACCOs should ensure continuous training of staff members, 12.5% indicated ensuring employee retention through provision of a better remuneration, 10.8% specified the organizations should also ensure equitable division of workload and 7.4% indicated identification of skills gap and knowledge-enhancing workshops. The managers also reported that the management of SACCOs should train employees on customer service and the importance of serving clients with passion. The managers also indicated that the management of SACCOs should undertake promotions on the basis of merit through the establishment of appropriate policies. They also suggested regular reviews to ensure that the policies are followed.

Further, SACCOs should employ more staff to reduce workload and employ highly skilled and experienced staff. Also, SACCOs should consider using training experts and consultants in training their staff on key concepts in sector of financial management, security and customer service. The managers also suggested that SACCOs should start providing competitive remuneration to their staff commensurate to the workload and productivity as well as provide mentorship and other incentives.

Table 4.20: Ways of Improving Human Capital in Deposit Taking SACCOs

	Frequency	Percent
Continuous training of staff members	24	13.6
Provision of a better remuneration	22	12.5
Ensure division of workload equitably	19	10.8
Identification of skills gap and knowledge-enhancing workshops	13	7.4
Train staff on customer service	12	6.8
Undertake promotions on the basis	12	6.8
Regular reviews to ensure that the policies are followed	11	6.3
Employ more staff to reduce workload	10	5.7
Employ highly skilled and experienced staff	9	5.1
Using training experts and consultants in training their staff	8	4.5
Providing competitive remuneration t	7	4.0
Mentorship	6	3.4
Incentives	6	3.4
Introduce contract terms of employment	5	2.8
More flexible working schedules	5	2.8
Investment in a measurable performance appraisal system	4	2.3
Monitoring employee performance	3	1.7
Total	**176**	**100.0**

4.6.3.2 Correlation Analysis

The results show that there exists a positive correlation between human capital and performance of deposit taking SACCOs in Kenya (r=0.436, p-value=0.000). The findings concur with Shady (2011) argument that human capital has a positive effect on performance of organizations. The effect of empowering human resource in an organization and its influence in the development of organization strategies is becoming more obvious in all types of firms today. Maithya (2016) indicates that a firm should not expect to meet its operations and its customers' needs if it does not have talented and efficient employees.

Table 4.21: Correlation Coefficients for Human Capital and Performance of SACCOs

		Performance of SACCOs	Human capital
Performance of SACCOs	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	176	
Human capital	Pearson Correlation	.436**	1
	Sig. (2-tailed)	.000	
	N	176	176

4.6.3.3 Regression Analysis

The study used a univariate analysis to investigate the effect of human capital on performance of deposit taking SACCOs in Kenya. The null hypothesis stated:

$H_0$2: Human capital has no significant effect on performance of deposit taking SACCOs in Kenya

As indicated in Table 4.22, the r-squared for the relationship between human capital and performance of performance deposit taking SACCOs in Kenya was 0.190. This shows that human capital can explain 19.0% of the performance of deposit taking SACCOs in Kenya. This implies that 81% of the performance of deposit taking SACCOs in Kenya is accounted for by other factors not considered in the model.

Table 4.22: Model Summary for Human capital and Performance of SACCOs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.436[a]	.190	.186	.36280

a. Predictors: (Constant), Human capital

As shown in Table 4.23, the F-calculated (40.866) was greater than the F-critical (3.84) and the p-value (0.000) was less than the significance level (0.05), which implies that the model is a good fit for the data and hence can be used to predict the effect of human capital on the deposit taking SACCOs in Kenya.

Table 4.23: ANOVA for Human capital and Performance of SACCOs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.379	1	5.379	40.866	.000[b]
	Residual	22.902	174	.132		
	Total	28.281	175			

a. Dependent Variable: Performance of SACCOs

b. Predictors: (Constant), Human capital

From the results (Table 4.24) the regression model was;

$$Y = 2.260 + 0.402X_2$$

The findings, as depicted in Table 4.24, show that the performance of deposit taking SACCOs in Kenya will be having an in index of 2.260 when human capital is held constant. In addition, the Beta coefficient was 0.402 for the relationship between human capital and the deposit taking SACCOs in Kenya. This shows that a unit improvement in human capital would lead to a 0.402 improvement in the performance of deposit taking SACCOs in Kenya. The relationship is significant as the p-value (0.000) was less than the significance level (0.05). Therefore we can reject the null hypothesis that "Human capital has no significant effect on deposit taking SACCOs in Kenya". These findings are in line with Ali and Chaudhry (2013) findings that human capital has a positive effect on organization performance in the service sector of Punjab. In addition, the findings agree with Yen (2013) findings that human capital has a significant effect on organizational performance in Taiwan. Human resource can create value to a firm in different ways and if the management of the human resource is done effectively, then the

motivation and productivity of the workers rises which sees the firm create more value. However, if there are gaps and unavailability of human capital resources then the business can face problems as tries to develop and launch new products, hire workers or even develop. Meichang, Wenzhong and Dan (2017) argue that if the firm is to successfully meet its objectives, then it needs to have human resources that are proficient in their tasks and internal systems that are efficient.

Table 4.24: Regression Coefficients for Human capital and Performance of SACCOs

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.260	.246		9.206	.000
	Human capital	.402	.063	.436	6.393	.000

a. Dependent Variable: Performance of SACCOs

4.6.4 Technological Resources and Performance of SACCOs

Technology is necessary for both private and public firms as it allows organizations to meet the needs of their clients efficiently. Moturi and Mbiwa (2015) indicate that information technology is a paramount source of value for firms and it allows for improved performance. The third specific objective of the current research was to find out how technological resource affects the deposit taking SACCOs in Kenya.

4.6.4.1 Descriptive Analysis

4.6.4.1.1 Aspects of Technological Resources

The managers were asked to specify their agreement levels on various statements on the effect of technological resource on their deposit taking SACCOs. The results are as presented in Table 4.25. Songoro, Odhiambo and Musiega (2017) indicate that SACCOs have partnered with Cooperative bank and have introduced Sacco Link M-banking service. With a mean of 4.579 (SD = 0.671) the managers agreed the use of mobile banking to increased customers' convenience. The managers agreed with a mean of 4.460 (SD = 0.820) that their organizations had adopted mobile banking for member's deposits and withdrawals. This is in agreement with Songoro, Odhiambo and Musiega (2017) findings that most SACCOs have partnered with Cooperative bank and have introduced Sacco Link M-banking service.

Further, the managers agreed with a mean of 4.267 (SD = 0.914) that mobile banking services in their SACCOs are reliable and secure. These findings agree with Keah (2016) findings that increased use of ICT, including mobile banking, improved the SACCOs financial performance. The payments processes improved and service time was reduced because services could be electronically provided to the customers. The managers were neutral on the statement that their organizations provided agency services for commercial banks mobile money companies as shown by a mean of 3.215 (SD = 1.334).

An ATM is an electronic device that enables customers to carry out digital financial transaction activities such as depositing, transfer and withdrawal of funds at their time of preference without physical interaction with tellers. The managers were neutral on the statement indicating that the management in their organizations have invested in ATM to improve on operational performance as shown by a mean of 3.375 (SD= 1.412). These findings agree with Songoro, Odhiambo and Musiega (2017) that by use of technological innovations such as internet banking and automated teller machines, and

computer technology that SACCOs were cutting down on operational costs. Today, the benefits of use of innovativeness by SACCOs are visible more so in terms of improved efficiency, operations, and service delivery among other improvements. With a mean of 3.164 (SD= 1.549) the managers were neutral on the statement that their organizations offer automated teller machines' services with other financial institutions. In addition, the managers were neutral on the statement that in their SACCOs, ATM terminals are continuously monitored to prevent down time which could cause loss of ATM productivity as shown by a mean of 2.937 (SD=0.489). The managers were also neutral on the statement that their organizations had established automated teller machines in different parts of the country as shown by a mean of 2.517 (SD= 1.418).

Management Information System is one of the components of technological resources and according to Yen (2013) the efficiency of operations in a SACCO is subject to proper matching of the available information technology and the SACCO functions. The managers highly agreed with a mean of 4.386 (SD = 0.666) that the use of information management system improves efficiency in service delivery. Also, the managers agreed with a mean of 4.295 (SD= 0.765) that their organizations had a sound technology management system in use for running operations. The findings are in line with Ali and Chaudhry (2013) argument that technology is necessary for both private and public firms as it allows organizations to meet the needs of their clients efficiently.

In addition, the managers agreed with a mean of 4.420 (SD = 0.728) that their SACCOs were making use of a management information system. The findings concur with Yen (2013) findings that the efficiency of operations in a SACCO is subject to proper matching of the available information technology and the SACCO functions. The managers also agreed with a mean of 4.153 (SD = 0.884) that the use of information management system reduces cost of service delivery. This supports findings by Songoro, Odhiambo and Musiega (2017) that had earlier indicated that as a consequence of technological innovations such as internet banking and connectivity, ICT, and computer technology, SACCOs were now cutting down on operational costs.

Table 4.25: Technological Resources

Statement	SD %	D %	N %	A %	SA %	Mean	Standard Deviation
Our organization has adopted mobile banking for member's deposits and withdrawals	1.1	4.0	2.3	59.7	33.0	4.460	.820
Our organization provides agency services for commercial banks mobile money companies	13.1	21.6	30.7	15.3	19.3	3.215	1.334
The use of mobile banking increase customer's convenience	.6	1.7	1.7	31.3	64.8	4.579	.671
Mobile banking services in our SACCO are reliable and secure	2.3	4.0	6.3	47.7	39.8	4.267	.914
Our organization offers automated teller machines' services with other financial institutions	21.0	20.5	8.5	2.0	29.0	3.164	1.549
Our organization has established automated teller machines in different parts of the country	30.1	30.7	11.4	13.1	14.8	2.517	1.418
In our SACCO, ATM terminals are continuously monitored to prevent down time which cause loss ATM productivity.	24.4	19.9	13.6	21.6	20.5	2.937	1.489
The management in our organization have invested in ATM to improve on operational performance	15.9	14.2	32.4	11.9	25.6	3.375	1.412
Our organization has a managements system used in running the operations	1.1	2.3	5.1	48.9	42.6	4.295	.765
The use of a management system improves efficiency in service delivery	.0	1.7	5.1	46.0	47.2	4.386	.666
The use of a management system reduces cost of service delivery	2.3	2.8	10.2	46.6	38.1	4.153	.884
The use of a management information system reduces the approval time	1.1	1.1	4.0	42.0	51.7	4.420	.728

4.6.4.1.2 Challenges Faced on Technological Resources in the Deposit Taking SACCOs

The managers were requested to indicate challenges faced with reference to technological resources in their respective deposit taking SACCOs. According to the results, 13.1% of the managers indicated that challenges related to technological resources in SACCOs were obsolescence and system failure, 11.9% specified cyber security threat, 10.8% pointed out machine failure and 10.2% specified MIS inadequacies. Other challenges include: lack of reliable network, change in technology, competition from mobile money transfer services and high cost of investment due to frequent changes in technology. Yen (2013) argues that information technology alignment such as information technology compatibility, information technology flexibility and network connectivity improves firm performance in volatile markets. Challenges with the advancement of technology makes it expensive keeping abreast of the ever-changing technological advancement and challenge of staff learning the new technology. The changing technology needs regular upgrades and modernization of system which is broad in operation. Kogo and Kimencu (2018) indicate that Information Technology (IT) infrastructure, ability of the firm to manipulate IT and skills of the employees to use IT to the best advantage were the main challenges facing organizations in relation to technology.

The staff at deposit taking SACCOs also indicated that cost of upgrading systems to latest versions, high maintenance costs, downtime in connectivity and linking branches and headquarters were also key challenges related to technological resource. The study also found that most of the staffs were not familiar with new technology in use and hence there was slowness in accepting technological changes. Muketi (2019) indicates that technological resources necessitate human technical skills, specialized tools, facilities, equipment, time, customer participation, and training for utilization. In addition, there were inadequate departmental budgets to purchase enough supporting equipment as well as to purchase and install automated teller machines.

Table 4.26: Challenges Faced on Technological Resources in the Deposit Taking SACCOs

	Frequency	Percent
Obsolescence and system failure	23	13.1
Cyber security threat	21	11.9
Machine failure	19	10.8
MIS inadequacies	18	10.2
Lack of reliable network	16	9.1
Change in technology	16	9.1
Competition from mobile money transfer services	15	8.5
High cost of investment due to frequent changes in technology	13	7.4
Cost of upgrading systems to latest versions	12	6.8
High maintenance costs	9	5.1
Downtime in connectivity and linking branches	8	4.5
Unfamiliar with new technology in use	6	3.4
Total	**176**	**100.0**

4.6.4.1.3 Suggested Ways of Improving Technological Resources in Deposit Taking SACCO

The staffs at deposit taking SACCOs were asked to suggest ways of improving technological resources in their deposit taking SACCOs. As shown in Table 4.27, 15.3% of the staff at deposit taking SACCOs suggested that SACCOs should carry out frequent updates and upgrades especially network security systems, 13.1% specified upgrade co-banks systems so as to tackle current challenges and other emerging issues and improve on service delivery from the SACCOs' perspective, 10.8% suggested use of change management strategies (training of staff, effective communication and resource allocation and 9.1% indicated adequate budgetary allocation to the ICT departments and proper service level agreement (SLA) with vendors In addition, SACCOs should introduce technology in phases, train staff on technology use and regularly upgrade equipment.

The managers further suggested adoption of modern technology practices like mobile banking and digitization of all business processes. In addition, SACCOs should ensure continuous maintenance of the management information system, antivirus installations, frequent system upgrade, system monitoring and firewall establishment as ways of ensuring reduction in cyber threat. Further, SACCOs should improve on robustness of the system to deter cyber security attackers as well as train staff on cyber security skills. The managers also suggested establishment of automated teller machines closer to people. Also, SACCOs should acquire networks from more reliable network developers, improve system efficiency and conduct staff education on the use of the systems.

Table 4.27: Ways of Improving Technological Resources in Deposit Taking SACCO

	Frequency	**Percent**
Frequent updates and upgrades of network security systems	27	15.3
Upgrade co-banks systems	23	13.1
Adoption of change management strategies	19	10.8
Adequate budgetary allocation to the ICT departments	16	9.1
Proper service level agreement with vendors	12	6.8
Introduce technology in phases	11	6.3
Train staff on technology use and regularly upgrade equipment.	10	5.7
Adoption of modern technology practices like mobile banking	9	5.1
Continuous maintenance of the management information system	8	4.5
Antivirus installations	8	4.5
Frequent system upgrade	7	4.0
System monitoring and firewall establishment	6	3.4
Improve on robustness of the system to deter cyber security attack	5	2.8
Train staff on cyber security skills	4	2.3
Establishment of automated teller machines closer to customers	4	2.3
Acquire network services from more reliable network developers	3	1.7
Improve system efficiency	2	1.1
Conduct staff education on the use of the systems	2	1.1
TOTAL	**176**	**100.0**

4.6.4.2 Correlation Analysis

The results show that there exists a positive correlation between technological resources and performance of deposit taking SACCOs in Kenya(r=0.299, p-value=0.000). These findings concur with García-Sánchez, García-Morales and Martín-Rojas (2018) argument that technological assets have a significant effect on organizational performance. The findings also agree with Preko (2014) findings that information technology investment favorably affects profitability and improves revenue and performance of the firm because it allows the organization take advantages of opportunities that enable it to be better positioned in the market.

Table 4.28: Correlation Coefficients for Technological Resources and Performance of SACCOs

		Performance of SACCOs	**Technological Resources**
Performance of SACCOs	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	176	
Technological Resource	Pearson Correlation	.299**	1
	Sig. (2-tailed)	.000	
	N	176	176

4.6.4.3 Regression Analysis

A univariate analysis was conducted to investigate the effect of technological resource on deposit taking SACCOs in Kenya. The null hypothesis stated:

$H_0$3: Technological resource has no significant effect on the performance of deposit taking SACCOs in Kenya

As indicated in Table 4.29, the r-squared for the relationship between technological resource and performance of deposit taking SACCOs in Kenya was 0.089. This shows that technological resource can explain 8.9% of the performance of deposit taking SACCOs in Kenya. This implies that 91.1% of the performance of deposit taking SACCOs in Kenya is accounted for by other factors not considered in the model.

Table 4.29: Model Summary for Technological Resource and Performance of SACCOs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.299[a]	.089	.084	.38475

a. Predictors: (Constant), Technological Resource

As shown in Table 4.30, the F-calculated (17.045) was greater than the F-critical (3.84) and the p-value (0.000) was less than the significance level (0.05), which implies that the model is a good fit for the data and hence can be used to predict the effect of technological resource on the deposit taking SACCOs in Kenya.

Table 4.30: ANOVA for Technological Resource and Performance of SACCOs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.523	1	2.523	17.045	.000[b]
	Residual	25.758	174	.148		
	Total	28.281	175			

a. Dependent Variable: Performance of SACCOs

b. Predictors: (Constant), Technological Resource

From the results (Table 4.31) the regression model was;

$$Y = 3.075 + 0.195X_3$$

The findings, as depicted in Table 4.31, show that the performance of deposit taking SACCOs in Kenya will have in index of 3.075 when technological resource was held constant. In addition, the Beta coefficient was 0.195 for the relationship between technological resource and the deposit taking SACCOs in Kenya. This shows that a unit improvement in technological resource would lead to a 0.195 improvement in the deposit taking SACCOs in Kenya. The relationship is statistically significant as the p-value (0.000) was less than the significance level (0.05). Therefore we can reject the null hypothesis that "Technological resource has no significant effect on the deposit taking SACCOs in Kenya". These findings agree with Reichert and Zawislak (2014) findings that technological capability and resource positively influences firm performance among Brazilian firms. The findings also concur with Kogo and Kimencu (2018) argument that technological resources and capabilities in terms of Information Technology (IT) infrastructure, ability of the firm to manipulate IT, skills of the employees to be able to use IT had a significant effect on organizational performance. Technology is necessary in the operations of SACCOs as it allows organizations to meet the needs of their clients effectively. Ali and Chaudhry (2013) noted that firms should share knowledge among each other if they want to effectively respond to environmental threats. The efficiency of operations in a SACCO is subject to proper matching of the available information technology and the SACCO functions. The findings of the study agree with Preko (2014) argument that information technology investment favorably affects profitability and improves revenue and performance of the firm because it allows the organization take advantages of opportunities that enable it to be better positioned in the market.

Table 4.31: Regression Coefficients for Technological Resource and Performance of SACCOs

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.075	.183		16.824	.000
	Technological Resource	.195	.047	.299	4.129	.000

a. Dependent Variable: Performance of SACCOs

4.6.5 Physical Resources and Performance of SACCOs

Physical resources comprise of equipment, buildings among other resources that are used to create goods and services (Brackertz, 2016). However, these resources can only be a source of value if they are relevant and adequate. The fourth objective of the study was to examine how physical resource affects the deposit taking SACCOs in Kenya.

4.6.5.1 Descriptive Analysis

4.6.5.1.1 Aspects of Physical Resources

The managers at deposit taking SACCOs were asked to point out their agreement levels on various statements regarding physical resources in their deposit taking SACCO. The results were as shown in Table 4.32. One of the physical resources in SACCOs is office furniture and stationery. From the findings, the staffs at deposit taking SACCOs agreed with a mean of 4.250 (SD = 0.696) that their organizations had provided adequate printers and printing papers. Further, the managers agreed with a mean of 4.261 (SD = 0.658) that there is enough stationery in their offices. In addition, the managers agreed that the tables' chairs and cabinets in organization are well maintained and their organizations had modern tables, chairs and cabinets as shown by means of 3.965 and 3.875 and standard deviations of 0.806 and 0.904, respectively. Brackertz (2016) agrees that physical resources comprise of equipment and buildings among other resources and

they are used to create goods and services. In addition, Bartocho (2016) indicates that physical capital resource capabilities such as the need for adequate stocks to service customer needs, offering services in firm's own buildings, ICT facilities for use by employees in serving customers, dependable fleet of vehicles for logistics efficiency and customer care facilities among others will facilitate employee performance in offering efficient service delivery. The managers agreed with a mean of 3.863 (SD= 0.816) that the tables, chairs and cabinets in their organizations were adequate. The staffs at deposit taking SACCOs were neutral on the statement that SACCOs have agronomic chairs which improve on staff physical being and mental health as shown by a mean of 3.380 (SD = 1.174).

Another important physical resource in SACCOs in Kenya is equipment. From the findings, the staffs at deposit taking SACCOs agreed with a mean of 4.306 (SD= 0.682) that their organizations had provided adequate computers. According to Songoro, Odhiambo and Musiega (2017) SACCOs have invested in technology infrastructure through the purchase of hardware and software. The managers were also neutral on the statement that their organizations had motor vehicles to ensure easier movement of staff members as shown by means of 3.460 (SD = 1.321).

The third important physical resource in SACCOs is buildings and land. The managers further agreed that their offices had adequate ventilations to make staff comfortable and they had adequate space for running all operations as shown by means of 4.005 and 3.954 and standard deviations of 0.970 and 1.057, respectively. These findings agree with Njagi (2018) argument that physical resources including adequate and well ventilated working environment positively affect the performance of institutions. The managers were also neutral on the statement that their organizations own the buildings hosting them as shown by a mean of 3.085 (SD = 1.563). Further, the managers were neutral on the statement that their organizations own the land on which their offices stood as shown by a mean of 3.068 (SD= 1.551).

Table 4.32: Physical Resources

Statement	SD %	D %	N %	A %	SA %	Mean	Standard Deviation
Our organization has modern tables, chairs and cabinets	2.8	7.4	8.5	61.9	19.3	3.875	.904
The tables chairs and cabinets in our organization are adequate	1.7	6.3	11.9	64.2	15.9	3.863	.816
The tables chairs and cabinets in organization are well maintained	.6	6.8	10.2	60.2	22.2	3.965	.806
Our SACCO has agronomic chairs which improve on staff physical being and mental health	9.1	12.5	26.7	34.7	17.0	3.380	1.174
Our organization has motor vehicles to ensure easier movement of staff members	13.1	11.9	14.2	37.5	23.3	3.460	1.321
Our organization has provided adequate computers	.6	1.7	4.0	54.0	39.8	4.306	.682
Our organization has provided adequate printers and printing papers	.6	2.3	4.5	56.8	35.8	4.250	.696
There is enough stationary in our offices	.0	1.1	8.5	53.4	36.9	4.261	.658
Our organization owns the land on which our offices are built	23.9	19.9	6.8	24.4	25.0	3.068	1.551
Our organization owns the building hosting it	23.9	19.9	6.3	23.9	26.1	3.085	1.563
Our offices have adequate space for running all operations	5.7	4.5	10.2	47.7	31.8	3.954	1.057
Our offices have adequate ventilations to make staff comfortable	4.5	3.4	9.1	52.8	30.1	4.005	.970

4.6.5.1.2 Challenges Faced on Physical Resources in the Deposit Taking SACCOs

The managers at deposit taking SACCOs were asked to indicate the challenges faced with reference to physical resources in their deposit taking SACCOs. According to the

results, 13.6% of the managers indicated that challenges related to physical resources in SACCOs included inconveniences in power interruptions, 12.5% specified high cost of building and motor vehicles acquisition, 10.8% pointed out fast asset depreciation and 10.2% specified escalating rent. The managers also indicated that most of SACCOs work with old chairs and tables, inadequate tables, chairs and cabinets and most of SACCOs do not operate in their own buildings. Njagi (2018) notes that adequacy, quality, capacity and the maintenance of SACCO physical resources are important aspects that can improve the performance of the SACCOs.

Table 4.33: Challenges Faced on Physical Resources in the Deposit Taking SACCOs

	Frequency	**Percent**
Inconveniences in power interruptions	24	13.6
High cost of building and motor vehicles acquisition	22	12.5
Fast asset depreciation	19	10.8
Escalating rent	18	10.2
Lack of enough space	15	8.5
Inconvenient office location	14	8.0
Noise and air pollution	14	8.0
ICT infrastructure	13	7.4
Lack of lifts in some buildings	10	5.7
Lack of modern office facilities	9	5.1
Poor ventilation and cold temperature emanating from the service rooms	7	4.0
Using won out office equipment	6	3.4
Rental cost incurred due to lack of office	5	2.8
Total	**176**	**100.0**

4.6.5.1.3 Suggested Ways of Improving Physical Resources in Deposit Taking SACCOs

The managers at deposit taking SACCOs were asked to suggest ways of improving to physical resources in their deposit taking SACCOs. According to the results, 12.5% of the staff suggested that SACCOs should improve conditions of the office, 11.4% specified increase branches and 10.2% indicated investment in land and buildings, 9.7% pointed out investment in ICT infrastructure. Further the managers suggested that their SACCOs should consider buying motor vehicles to facilitate easier movement of staff. Also, SACCOs should consider establishment of capital budgets to replace old stock and acquisition of long lasting assets. The respondents also suggested that SACCOs should establish more outlets to serve members that come from far distance, redesigning of the available space, improving ventilation in their offices and increasing the work area to ease movement in offices.

Table 4.34: Ways of Improving Physical Resources in Deposit Taking SACCOs

	Frequency	**Percent**
Improve conditions of the office	22	12.5
Increase branches	20	11.4
Invest in land and buildings	18	10.2
Invest in ICT infrastructure	17	9.7
Invest in new office stationaries	17	9.7
Buying motor vehicles to facilitate easier movement of staff members	16	9.1
Dispose of items immediately they are no longer serviceable	15	8.5
Establishment of capital budgets to replace old stock and acquisition of long lasting assets	14	8.0
Establish more outlets to serve members that come from a far distance	11	6.3
Redesigning of the available space	11	6.3
Improving ventilation in their offices	8	4.5
Increasing the work area to ease movement in offices.	7	4.0
Total	**176**	**100.0**

4.6.5.2 Correlation Analysis

The results show that physical resources have a positive correlation with performance of deposit taking SACCOs in Kenya(r=0.394, p-value=0.000). These findings are in line with Ramli, and Rosmaizura (2018) argument that physical resources including hostels, sports facilities, parking and transportation facilities have a positive effect on performance. Njagi (2018) indicates that adequacy, quality, capacity and the maintenance of SACCO physical resources are important aspects that can improve performance. The efficiency of using physical resources can lead to decreased costs which lead to improved performance.

Table 4.35: Correlation Coefficients for Physical Resources and Performance of SACCOs

		Performance of SACCOs	**Physical Resources**
Performance of SACCOs	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	176	
Physical Resource	Pearson Correlation	.394**	
	Sig. (2-tailed)	.000	
	N	176	176

4.6.5.3 Regression Analysis

A univariate analysis was conducted to investigate the effect of physical resource on performance of deposit taking SACCOs in Kenya. The null hypothesis stated:

$H_0$4: Physical resources have no significant effect on performance of deposit taking SACCOs in Kenya

As indicated in Table 4.36, the r-squared for the relationship between physical resource

and performance of deposit taking SACCOs in Kenya was 0.153. This shows that physical resource can explain 15.3% of the deposit taking SACCOs in Kenya. This implies that 84.7% of the performance of deposit taking SACCOs in Kenya is accounted for by other factors not considered in the model.

Table 4.36: Model Summary for Physical Resources and Performance of SACCOs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.391[a]	.153	.148	.37104

a. Predictors: (Constant), Physical Resource

As shown in Table 4.37, the F-calculated (31.425) was greater than the F-critical (3.84) and the p-value (0.000) was less than the significance level (0.05), which implies that the model is a good fit for the data and hence can be used to predict the effect of physical resource on the deposit taking SACCOs in Kenya.

Table 4.37: ANOVA for Physical Resource and Performance of SACCOs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.326	1	4.326	31.425	.000[b]
	Residual	23.955	174	.138		
	Total	28.281	175			

a. Dependent Variable: Performance of SACCOs

b. Predictors: (Constant), Physical Resource

From the results (Table 4.38) the regression model was;

$$Y = 2.890 + 0.245X_4$$

The findings, as depicted in Table 4.38, show that the performance of deposit taking SACCOs in Kenya will be having an in index of 2.890 when physical resources are held constant. In addition, the Beta coefficient was 0.245 for the relationship between

physical resources and the deposit taking SACCOs in Kenya. This shows that a unit improvement in physical resources would lead to a 0.245 improvement in the deposit taking SACCOs in Kenya. The relationship is statistically significant as the p-value (0.000) was less than the significance level (0.05). Therefore we can reject the null hypothesis that "Physical resources have no significant effect on deposit taking SACCOs in Kenya". These findings are in line with Njagi (2018) results that physical resources affect the performance of institutions. Similarly, these findings further agree with Nturibi (2016) findings that physical resources have a positive effect on the performance of public primary schools in Meru County. Generally, the availability of physical resource such as equipment, buildings, among others creates competitive advantage in an organization. However, having of physical resources by a firm does not mean that the performance of the organization will improve. The efficiency of using such resources can lead to decreased costs which lead to improved performance. Nonetheless, just as the findings of this study show, relevance, adequacy, quality, capacity and the maintenance of SACCO physical resources are important aspects that can improve the performance of the SACCOs.

Table 4.38: Regression Coefficients for Physical Resources and Performance of SACCOs

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	2.890	.168		17.180	.000
	Physical Resource	.245	.044	.391	5.606	.000

a. Dependent Variable: Performance of SACCOs

4.6.6 Organizational Strategic Resources

A multivariate analysis was conducted to investigate the combined overall effect of organizational strategic resources on the performance of deposit taking SACCOs in Kenya.

Combined organizational strategic resources comprised of financial resources, human capital, technological resources and physical resources. The r-squared between these four independent variables and performance of deposit taking SACCOs was 0.263, which implied that 26.3% of the performance of deposit taking SACCOs can be explained by the combined effect of human resources, ICT infrastructure, physical assets and financial capacity (Table4.39).

Table 4.39: Model Summary for Organizational Strategic Resources and Performance of SACCOs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.513[a]	.263	.246	.34917
2	.576[b]	.332	.296	.33734

1. Predictors: (Constant), Physical Resources, Technological Resources, Financial Resources, Human capital

From the findings, the F-calculated, as shown in Table 4.40, was 15.241. Since the F-calculated was more than the F-critical (2.371), the model was good fit for the data and hence they could be used in predicting the combined effect of financial resources, human capital, technological resources and physical resources on performance of deposit taking SACCOs.

Table 4.40: ANOVA for Organizational Strategic Resources and Performance of SACCOs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.433	4	1.858	15.241	.000[b]
	Residual	20.849	171	.122		
	Total	28.281	175			

a. Dependent Variable: Performance of SACCOs

b. Predictors: (Constant), Physical Resources, Technological Resources, Financial Resources, Human capital

By substituting the beta values as well as the constant term (Table 4.41), the model emanating from the regression modeling would be as follows:

$$Y= 1.672 + 0.187X_1 + 0.263X_2 + 0.007X_3 + 0.104X_4$$

The findings show that financial resource has a statistically significant effect on performance of deposit taking SACCOs as shown by a regression coefficient of 0.187 (p-value=0.010). In addition, human capital has a statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 0.263 (p-value=0.001). However, the results show that technological resource when combined with other resources has no statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 0.007 (p-value=0.901). Further, the result indicated that physical resources have a positive and statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 0.104 (p-value=0.039).

Table 4.41: Regression Coefficients for Organizational Strategic Resources and Performance of SACCOs

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.672	.292		5.735	.000
	Financial Resource	.187	.072	.195	2.619	.010
	Human capital	.263	.077	.285	3.420	.001
	Technological Resource	.007	.053	.010	.125	.901
	Physical Resource	.104	.050	.166	2.075	.039

a. Dependent Variable: Performance of SACCOs

4.6.7 Organizational Strategic Resources, Firm Size and Performance of SACCOs

Firm size is characterized by the firms' production capacity and the amount of services or products it can produce to meets its customer's needs. One of the advantages of firm size is the provision of economies of scale. The fifth objective of the study was to evaluate the moderating effect of firm size on the relationship between organizational strategic resources and performance of deposit taking SACCOs in Kenya.

4.6.7.1 Descriptive Analysis

4.6.7.1.1 Aspects of Firm Size

The managers at deposit taking SACCOs were requested to indicate their level of agreement with various statements on firm size in their deposit taking SACCOs. The results were as presented in Table 4.42. The staffs at deposit taking SACCOs in the selected SACCOs agreed with a mean of 3.840 (SD = 0.972) that the number of staff in their organizations had been increasing over the years. Additionally, the managers at

deposit taking SACCOs agreed with a mean of 3.534 (SD = 1.019) that their organizations recruit new staff annually to meet the workload demands.

These findings agree with Rotich (2016) findings that there was a positive and significant relationship between sustainable competitive advantage of the firm and adequacy of the firm's human resource. However, the managers were neutral on the statement that the number of employees promoted to senior positions have been increasing over the years as shown by a mean of 3.437 (SD= 1.104).

According to the findings, the staffs at deposit taking SACCOs agreed with a mean of 4.227 (SD = 0.671) that the shareholders in their SACCOs had been increasing over the years. They further agreed with a mean of 4.028 (SD = 0.851) that the management in their SACCOs met with staff so as to explore how they can encourage new members to invest in the organization. In addition, the staffs at deposit taking SACCOs agreed with a mean of 3.897 (SD = 0.997) that their organizations extend loyalty benefit to the most valued members. According to Niresh and Velnampy (2014) the size of a SACCOs and its number of branches are determined by the number of members they have, and hence one of the goals and objectives of a SACCO should be to increase number of members.

The managers also agreed with a mean of 4.153 (SD = 0.795) that the brand value of their organizations has been improving over the years. The managers agreed with a mean of 3.988 (SD= 0.821) that the total assets in their organizations had been increasing. According to Bartocho (2016), economies of scale allow a firm to grow in terms of size and results when outputs increase at a higher rate than the rate of inputs. The managers further agreed with a mean of 3.909 (SD = 0.794) that their organizations possess quality assets. Abiodun (2013) indicates organizations that are very big are powerful and are able to resist pressures from external sources and thus they are not too socially responsive. Further, the managers agreed with a mean of 3.840 (SD = 0.873) that product and service cost in their organizations had been increasing.

Table 4.42: Firm Size

	SD %	D %	N %	A %	SA %	Mean	Standard Deviation
The number of staff in our organization has been increasing over the years	2.8	8.5	13.6	51.7	23.3	3.840	.972
Our organization recruit new staff annually to meet the workload demands	3.4	12.5	27.8	39.8	16.5	3.534	1.019
The number of employees promoted to senior positions have been increasing over the years	6.3	14.8	22.7	41.5	14.8	3.437	1.104
The shareholders in our SACCO have been increasing over the years	.6	.6	8.5	56.3	34.1	4.227	.671
The management in our SACCO meets with staff so as to explore how they can encourage new members to invest in the organization	1.7	5.7	7.4	58.5	26.7	4.028	.851
Our organization extends loyalty benefit to the most valued members	2.8	6.8	17.6	43.2	29.5	3.897	.997
Our organization possess quality assets	1.1	1.7	24.4	50.6	22.2	3.909	.794
The total assets in our organization have been increasing	.6	5.7	13.6	54.5	25.6	3.988	.821
Product and service cost in our organization has been increasing	1.7	6.3	18.2	54.0	19.9	3.840	.873
The brand value of our organization has been improving over the years	.6	4.0	9.7	51.1	34.7	4.153	.795

4.6.7.1.2 Challenges Faced on Firm Size in the Deposit Taking SACCOs

The managers at deposit taking SACCOs were asked to indicate the challenges faced with reference to their firm size. As shown in Table 4.43, 17.0% of the managers specified that the main challenge was slow capital growth, 10.8% indicated lack of branches, 9.7% specified limited range of financial products and 8.0% pointed out low

membership. Other challenges include: member dormancy, slow product promotion rate, and expensive brand development.

Table 4.43: Challenges Faced on Firm Size in the Deposit Taking SACCOs

	Frequency	**Percent**
Slow capital growth	30	17.0
Lack of branches	19	10.8
Limited range of financial products	17	9.7
Low membership	14	8.0
Member dormancy	13	7.4
Slow product promotion rate	13	7.4
Expensive brand development	13	7.4
High wage bill	12	6.8
High rental cost	11	6.3
Relatively small firm size	10	5.7
Failure to employ new staff	9	5.1
Lack of quality assets	8	4.5
Wide geographical spread of new members away from the branch limits physical contacts with them.	7	4.0
TOTAL	**176**	**100.0**

4.6.7.1.3 Suggested Ways of Improving Firm Size in Deposit Taking SACCOs

The managers at deposit taking SACCOs were asked to suggest ways of improving the size of their SACCOs. According to the results, 14.2% of the managers suggested that SACCOs should increase branches, 13.6% specified introduction of more enticing products as a way of increasing attractiveness and therefore size of their membership, 11.9% suggested that for SACCOS to be more competitive there was a need for the top management and shareholders to consider merging with other SACCOs to increase membership, 11.4% indicated enhancing capital base and 10.8% specified lowering cost of doing business. Keah (2016) indicates that size of the SACCOS did affect positively their financial performance with larger SACCOs showing a more positive effect on performance as they had different capabilities and were able to better reap from economies of scale. Further a rise on the assets of the SACCOs led to higher profitability. However to the contrary, Niresh and Velnampy (2014) in a study carried out in Sri Lanka observed that there was no significant relationship between organization's size and its profitability. The respondents also suggested that SACCOs should use social media to advertise their organizations and serve their customers better to earn referrals from them. Further SACCOs should educate members on products offered or those available and encourage the existing members to refer customers more to their SACCO and increase the number of branches. Further they should invest more in marketing, research and development and create a reward system for staff to encourage innovative ideas.

Table 4.44: Ways of Improving Firm Size in Deposit Taking SACCOs

	Frequency	Percent
Increase branches	25	14.2
Introduce more enticing products as a way of increasing attractiveness	24	13.6
SACCOS should merge up to be more competitive	21	11.9
Increase membership	20	11.4
Increase capital base	19	10.8
Lower cost of doing business	18	10.2
Use social media to advertise the SACCOS	12	6.8
Serve the customers better to earn referrals from them	10	5.7
Educate members on products offered or those available	8	4.5
Encourage the existing members to refer customers more to their SACCO	7	4.0
Increase the number of branches.	6	3.4
Invest more in marketing	5	2.8
Research and development and create a reward system for staff to encourage innovation	1	0.6
Total	**176**	**100.0**

4.6.7.2 Correlation Analysis

The results further showed that there exists a positive correlation between firm size and performance of deposit taking SACCOs in Kenya (r=0.385, p-value=0.000). These findings are in agreement with Dogan (2013) argument that firm size affects both strategic organizational resources and profitability. Niresh and Velnampy (2014) indicate that large organizations in terms of total assets and number of employees are more able to sustain their expenditures and to react to changes in the operating environment more effectively. Such firms have more resources at their disposal and resource slack. Such benefits allow firms to use wider and better strategies to stay ahead of competitors.

Table 4.45: Correlation Coefficients for Firm Size and Performance of SACCOs

		Performance of SACCOs	Firm Size
Performance of SACCOs	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	176	
Firm Size	Pearson Correlation	.385**	1
	Sig. (2-tailed)	.000	
	N	176	176

4.6.7.3 Moderating Effect Regression Analysis

Moderation happens when the relationship between the dependent variable and the independent variables is dependent on a third variable (moderating variable). The effect that this variable has is termed as interaction as it affects the direction or strength of the relationship between the dependent and independent variable.

4.6.7.3.1 Financial Resource

A stepwise regression analysis was conducted to examine the moderating effect of firm size on the relationship between financial resources on performance of deposit taking SACCOs in Kenya.

The null hypothesis stated:

$H_0$5a: Firm size has no significant moderating influence on the relationship between financial resources and performance of deposit taking SACCOs in Kenya.

Model 1 (Table 4.46) shows the relationship between financial resources and performance of deposit taking SACCOs in Kenya.

The r squared for the relationship between financial resources and performance of deposit taking SACCOs was 0.131, which implied that 13.1% of the performance of

deposit taking SACCOs can be explained by financial resource. However, in Model 2 which constituted financial resource and financial resources*firm size, the r-squared was 0.244. This implies that the introduction of firm size in the second model led to an increase in r-squared, showing that firm size moderates the relationship between financial resources and the performance of deposit taking SACCOs.

Table 4.46: Model Summary for Firm Size, Financial Resources and Performance of SACCOs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.362[a]	.131	.126	.37588
2	.494[b]	.244	.231	.35247

a. Predictors: (Constant), Financial Resource

b. Predictors: (Constant), Financial Resources, Firm Size, Financial Resources*Firm Size

From the findings, the F-calculated for the first model, as shown in Table 4.47, was 26.166 and for Model 2 was 18.549. Since the F-calculated for the two models were more than the F-critical, 3.8515 (first model) and 2.6049 (second model), the two models were good fit for the data and hence they could be used in predicting the moderating effect of firm size on the influence of financial resource on performance of deposit taking SACCOs.

Table 4.47: ANOVA for Firm Size, Financial Resources and Performance of SACCOs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.697	1	3.697	26.166	.000[b]
	Residual	24.584	174	.141		
	Total	28.281	175			
2	Regression	6.913	3	2.304	18.549	.000[c]
	Residual	21.368	172	.124		
	Total	28.281	175			

a. Dependent Variable: Performance of SACCOs
b. Predictors: (Constant), Financial Resources
c. Predictors: (Constant), Financial Resources, Firm Size, Financial Resources*Firm Size

In the first model, as shown by Table 4.48, by substituting the beta values as well as the constant term, model 1 emanating from the first step in regression modeling would be as follows:

$$Y= 2.508 + 0.347X_1$$

The findings show that financial resources had a statistically significant effect on performance of deposit taking SACCOs as shown by a regression coefficient of 0.347 (p-value=0.000).

In the second regression model, by substituting the beta values as well as the constant term, model 2 emanating from the second step in regression modeling was as follows:

$$Y=-2.466 + 1.514X_1 + 1.462Z -0.345X_1*Z$$

The model indicated that finance resources had a positive and statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 1.514 (p-value=0.000. However, Financial Resources*Firm Size had an

inverse and significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of -0.345(p-value=0.000).

Table 4.48: Coefficients for the Relationship between Firm Size, Financial Resources and Performance of SACCOs

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.508	.258		9.723	.000
	Financial Resources	.347	.068	.362	5.115	.000
2	(Constant)	-2.466	1.269		-1.943	.054
	Financial Resources	1.514	.349	1.578	4.331	.000
	Firm Size	1.462	.336	2.052	4.344	.000
	Financial Resources*Firm Size	-.345	.090	-2.794	-3.836	.000

a. Dependent Variable: Performance of SACCOs

4.6.7.3.2 Human Capital

A stepwise regression analysis was conducted to examine the moderating effect of firm size on the relationship between human capital on performance of deposit taking SACCOs in Kenya.

The null hypothesis stated:

$H_0$5b: Firm size has no significant moderating influence on the relationship between human capital and performance of deposit taking SACCOs in Kenya.

Model 1 (Table 4.49) shows the relationship between human capital and performance of deposit taking SACCOs in Kenya. The r squared for the relationship between human capital and performance of deposit taking SACCOs was 0.190, which implied that 19.0% of the performance of deposit taking SACCOs can be explained by human capital. However, in Model 2, in Table 4.49, which constituted human capital and

human capital*firm size, the r-squared was 0.25.3. This implies that the introduction of firm size in the second model led to an increase in r-squared, showing that firm size moderates the relationship between human capital and the performance of deposit taking SACCOs.

Table 4.49: Model Summary for Firm Size, Human Capital and Performance of SACCOs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.436[a]	.190	.186	.36280
2	.503[b]	.253	.240	.35056

a. Predictors: (Constant), Human capital

b. Predictors: (Constant), Human capital, Firm Size, Human capital*Firm Size

From the findings, the F-calculated for the first model, as shown in Table 4.50, was 40.866 and for the second model was 19.379. Since the F-calculated for the two models were more than the F-critical, 3.8515 (first model) and 2.6049 (second model), the two models were good fit for the data and hence they could be used in predicting the moderating effect of firm size on the influence of human capital on performance of deposit taking SACCOs.

Table 4.50: ANOVA for Firm Size, Human Capital and Performance of SACCOs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.379	1	5.379	40.866	.000[b]
	Residual	22.902	174	.132		
	Total	28.281	175			
2	Regression	7.144	3	2.381	19.379	.000[c]
	Residual	21.137	172	.123		
	Total	**28.281**	**175**			

a. Dependent Variable: Performance of SACCOs

b. Predictors: (Constant), Human capital

c. Predictors: (Constant), Human capital, Firm Size, Human capital*Firm Size

In the first model, as shown by Table 4.51, by substituting the beta values as well as the constant term, model 1 emanating from the first step in regression modeling would be as follows:

$$Y= 2.260 + 0.402X_1$$

The findings show that human capital has a statistically significant effect on performance of deposit taking SACCOs as shown by a regression coefficient of 0.402 (p-value=0.000).

In the second regression model, by substituting the beta values as well as the constant term, model 2 emanating from the second step in regression modeling was as follows:

$$Y=--0.749+ 1.054X_1 + 910Z -0.201X_1*Z$$

The model indicated that human capital had a positive and statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 1.054 (p-value=0.000). However, financial resource*firm size had an inverse and significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of -0.201(p-value=0.007).

Table 4.51: Coefficients for Firm Size, Human Capital and Performance of SACCOs

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	2.260	.246		9.206	.000
	Human capital	.402	.063	.436	6.393	.000
2	(Constant)	-.749	1.068		-.701	.484
	Human capital	1.054	.286	1.144	3.683	.000
	Firm Size	.910	.284	1.278	3.201	.002
	Human capital*Firm Size	-.201	.074	-1.681	-2.736	.007

a. Dependent Variable: Performance of SACCOs

4.6.7.3.3 Physical Resources

A stepwise regression analysis was conducted to examine the moderating effect of firm size on the relationship between physical resources and performance of deposit taking SACCOs in Kenya.

The null hypothesis stated:

$H_0$5c: Firm size has no significant moderating influence on the relationship between physical resources and performance of deposit taking SACCOs in Kenya.

Model 1 (Table 4.52) shows the relationship between physical resources and performance of deposit taking SACCOs in Kenya.

The r squared for the relationship between physical resources and performance of deposit taking SACCOs was 0.153, which implied that 15.3% of the performance of deposit taking SACCOs can be explained by physical resource. However, in Model 2, which constituted physical resources and physical resources *firm size, the r-squared was 0.179. This implies that the introduction of firm size in the second model led to an increase in r-squared, showing that firm size positively moderates the relationship between physical resources and the performance of deposit taking SACCOs.

Table 4.52: Model Summary for Firm Size, Physical Resources and Performance of SACCOs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.391[a]	.153	.148	.37104
2	.423[b]	.179	.165	.36736

a. Predictors: (Constant), Physical Resource

b. Predictors: (Constant), Physical Resources, Firm Size, Physical Resources*Firm Size

From the findings, the F-calculated for the first model, as shown in Table 4.53, was 31.425 and for the second model was 12.521. Since the F-calculated for the two models were more than the F-critical, 3.8515 (first model) and 2.6049 (second model), the two models were good fit for the data and hence they could be used in predicting the moderating effect of firm size on the influence of physical resources on performance of deposit taking SACCOs.

Table 4.53: ANOVA for Firm Size, Physical Resources and Performance of SACCOs

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	4.326	1	4.326	31.425	.000[b]
	Residual	23.955	174	.138		
	Total	28.281	175			
2	Regression	5.069	3	1.690	12.521	.000[c]
	Residual	23.212	172	.135		
	Total	**28.281**	**175**			

a. Dependent Variable: Performance of SACCOs

b. Predictors: (Constant), Physical Resources

c. Predictors: (Constant), Physical Resources, Firm Size, Physical Resources*Firm Size

In the first model, as shown by Table 4.54, by substituting the beta values as well as the constant term, model 1 emanating from the first step in regression modeling would be as follows:

$$Y= 2.890 + 0.245X_1$$

The findings show that physical resources have a statistically significant effect on performance of deposit taking SACCOs as shown by a regression coefficient of 0.245 (p-value=0.000).

In the second regression model, by substituting the beta values as well as the constant term, model 2 emanating from the second step in regression modeling was as follows:

$$Y=-2.533 + 0.180X_1 + 0.186Z -0.008X_1*Z$$

The model indicated that physical resources had a statistically insignificant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 0.180 (p-value=0.119). However, physical resources *firm size had an inverse and not significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of -0.008(p-value=0.769).

Table 4.54: Coefficients for Firm Size, Physical Resources and Performance of SACCOs

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.890	.168		17.180	.000
	Physical Resources	.245	.044	.391	5.606	.000
2	(Constant)	2.533	.410		6.180	.000
	Physical Resources	.180	.115	.287	1.567	.119
	Firm Size	.186	.119	.261	1.564	.120
	Physical Resources*Firm Size	-.008	.026	-.082	-.294	.769

a. Dependent Variable: Performance of SACCOs

4.6.7.3.4 Technological Resources

A stepwise regression analysis was conducted to examine the moderating effect of firm size on the relationship between technological resources on performance of deposit taking SACCOs in Kenya.

The null hypothesis stated:

$H_0$5d: Firm size has no significant moderating influence on the relationship between technological resources and performance of deposit taking SACCOs in Kenya.

The first model (Table 4.55) shows the relationship between technological resources and performance of deposit taking SACCOs in Kenya.

The r squared for the relationship between technological resources and performance of deposit taking SACCOs was 0.89, which implied that 8.9% of the performance of deposit taking SACCOs can be explained by technological resources. However, in Model 2, in Table 4.55, which constituted technological resources and financial resources*firm size, the r-squared was 0.207. This implies that the introduction of firm size in the second model led to an increase in r-squared, showing that firm size moderates positively the relationship between technological resources and the performance of deposit taking SACCOs.

Table 4.55: Model Summary for Firm Size, Technological Resources and Performance of SACCOs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.299[a]	.089	.084	.38475
2	.455[b]	.207	.193	.36118

a. Predictors: (Constant), Technological Resources

b. Predictors: (Constant), Technological Resources, Firm Size, Technological Resources*Firm Size

From the findings, the F-calculated for the first model, as shown in Table 4.56, was 17.045 and for the second model was 14.932. Since the F-calculated for the two models were more than the F-critical, 3.8515 (first model) and 2.6049 (second model), the two models were good fit for the data and hence they could be used in predicting the moderating effect of firm size on the influence of technological resources on performance of deposit taking SACCOs.

Table 4.56: ANOVA for Firm Size, Technological Resources and Performance of SACCOs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.523	1	2.523	17.045	.000[b]
	Residual	25.758	174	.148		
	Total	28.281	175			
2	Regression	5.844	3	1.948	14.932	.000[c]
	Residual	22.438	172	.130		
	Total	**28.281**	**175**			

a. Dependent Variable: Performance of SACCOs

b. Predictors: (Constant), Technological Resources

c. Predictors: (Constant), Technological Resources, Firm Size, Technological Resources*Firm Size

In the first model, as shown by Table 4.57, by substituting the beta values as well as the constant term, model 1 emanating from the first step in regression modeling would be as follows:

$$Y= 3.075 + 0.195X_1$$

The findings show that technological resource has a statistically significant effect on performance of deposit taking SACCOs as shown by a regression coefficient of 0.347 (p-value=0.010).

In the second regression model, by substituting the beta values as well as the constant term, model 2 emanating from the second step in regression modeling was as follows:

$$Y=-0.614 + 930X_1 + 1.092Z -0.224X_1*Z$$

The model indicated that technological resource had a positive and statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 0.930 (p-value=0.001). However, technological resources *firm size had an inverse and significant effect on the performance of deposit taking SACCOs

as shown by a regression coefficient of -0.224(p-value=0.003) as moderated by firm size.

Table 4.57: Coefficients for Firm Size, Technological Resources and Performance of SACCOs

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.075	.183		16.824	.000
	Technological Resources	.195	.047	.299	4.129	.000
2	(Constant)	-.614	1.080		-.568	.571
	Technological Resources	.930	.281	1.422	3.312	.001
	Firm Size	1.092	.293	1.533	3.728	.000
	Technological Resources*Firm Size	-.224	.074	-2.158	-3.019	.003

a. Dependent Variable: Performance of SACCOs

4.6.7.3.5 Firm Size and Organizational Strategic Resources

To get the moderating effect of the firm size on the relationship between the dependent and combined independent variables, the researcher used step wise regression model. The fifth null hypothesis stated:

$H_0$5: Firm size has no significant moderating influence on the relationship between organizational strategic resources and deposit taking SACCOs in Kenya.

Model 1 (Table 4.58) included financial resource, human capital, technological resource and physical resource. The r squared between these four independent variables and performance of deposit taking SACCOs was 0.263, which implied that 26.3% of the performance of deposit taking SACCOs can be explained by financial resource, human

resource, technological resource, and physical resource. The low r-squared could be attributed to the fact that there may be many other factors that influence performance of SACCOs in Kenya.

However, in Model 2, in Table 4.58, which constituted of physical resources, technological resources, financial resources, human capital, firm size; physical resources*firm size, human capital*firm size, financial resources*firm size, technological resources*firm size, the r-squared was 0.332. This implies that the introduction of firm size in the second model led to an increase in r-squared, showing that firm size moderates the relationship between strategic organizational resources and the performance of deposit taking SACCOs. We can therefore reject the null hypotheses that firm size has no moderating effect on the relationship between strategic resources and performance of deposit taking SACCOs in Kenya.

Table 4.58: Model Summary for Firm Size, Organizational Strategic Resources and Performance of SACCOs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.513[a]	.263	.246	.34917
2	.576[b]	.332	.296	.33734

1. Predictors: (Constant), Physical Resources, Technological Resources, Financial Resources, Human capital

2. Predictors: (Constant), Physical Resources, Technological Resources, Financial Resources, Human capital, Firm Size, Physical Resources*Firm Size, Human capital*Firm Size, Financial Resources*Firm Size, Technological Resources*Firm Size

From the findings, the F-calculated for the first model, as shown in Table 4.59, was 15.241 and for the second model was 9.170. Since the F-calculated for the two models were more than the F-critical, 2.371 (first model) and 1.879 (second model), the two models were good fit for the data and hence they could be used in predicting the moderating effect of firm size on the organizational strategic resources on performance of deposit taking SACCOs.

Table 4.59: ANOVA for Firm Size, Organizational Strategic Resources and Performance of SACCOs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.433	4	1.858	15.241	.000[b]
	Residual	20.849	171	.122		
	Total	28.281	175			
2	Regression	9.391	9	1.043	9.170	.000[c]
	Residual	18.890	166	.114		
	Total	28.281	175			

a. Dependent Variable: Performance of SACCOs

b. Predictors: (Constant), Physical Resources, Technological Resources, Financial Resources, Human capital

c. Predictors: (Constant), Physical Resources, Technological Resources, Financial Resources, Human capital, Firm Size, Physical Resources*Firm Size, Human capital*Firm Size, Financial Resources*Firm Size, Technological Resources*Firm Size

In the first model, as shown by Table 4.60, by substituting the beta values as well as the constant term, model 1 emanating from the first step in regression modeling would be as follows:

$$Y= 1.672 + 0.187X_1 + 0.263X_2 + 0.007X_3 + 0.104X_4$$

The findings show that financial resources have a statistically significant effect on performance of deposit taking SACCOs as shown by a regression coefficient of 0.187 (p-value=0.010). In addition, human capital has a statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 0.263 (p-value=0.001). However, the results show that technological resources have no statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 0.007 (p-value=0.901). Further, the result indicated that physical resources have a positive and statistically significant effect on the performance

of deposit taking SACCOs as shown by a regression coefficient of 0.104 (p-value=0.039).

In the second regression model showing the moderating effect of Firm Size, by substituting the beta values as well as the constant term, model 2 emanating from the second step in regression modeling was as follows:

$Y=-3.492 + 0.1.264X_1 + 0.643X_2 - 0.043X_3 + 0.120X_4 + 1.3731Z - 0.286X_1*Z - 0.107X_2*Z + 0.014X_3*Z + 0.005X_4*Z$

The model indicated that finance resources had a positive and statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 1.264 (p-value=0.003). In addition, human capital had no statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 0.643 (p-value=0.133). Further, technological resources had no statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of -043 (p-value=0.909). The results also show that physical resources had no statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 0.120 (p-value=0.266).

The results further show that firm size had a positive and statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 1.373 (p-value=0.000). Moreover, the results indicated that the moderating interaction between financial resources and firm size has an inverse effect on the performance of deposit taking SACCOs as shown by a regression coefficient of -0.286 (p-value=0.009). The similar interaction between human capital and firm size has no statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 0.107 (p-value=0.330). Technological resources and firm size had no statistically significant effect on the performance of deposit taking SACCOs as shown by a regression coefficient of 0.014 (p-value=0.891). The interaction between physical resources and firm size had no statistically significant effect on the performance

of deposit taking SACCOs as shown by a regression coefficient of 0.005 (p-value=0.838).

Table 4.60: Regression Coefficients for Firm Size, Organizational Strategic Resources and Performance of SACCOs

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.672	.292		5.735	.000
	Financial Resources	.187	.072	.195	2.619	.010
	Human capital	.263	.077	.285	3.420	.001
	Technological Resources	.007	.053	.010	.125	.901
	Physical Resources	.104	.050	.166	2.075	.039
2	(Constant)	-3.492	1.312		-2.661	.009
	Financial Resources	1.264	.424	1.318	2.984	.003
	Human capital	.643	.426	.697	1.508	.133
	Technological Resources	-.043	.381	-.066	-.114	.909
	Physical Resources	.120	.107	.191	1.117	.266
	Firm Size	1.373	.356	1.927	3.855	.000
	Financial Resources*Firm Size	-.286	.109	-2.318	-2.627	.009
	Human capital*Firm Size	-.107	.109	-.891	-.977	.330
	Technological Resources*Firm Size	.014	.100	.132	.137	.891
	Physical Resources*Firm Size	.005	.026	.056	.205	.838

a. Dependent Variable: Performance of SACCOs

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusion and recommendations of the study as per the study hypothesis. Specifically, the chapter presents descriptive and inferential findings summary, followed by conclusions, recommendations for policy, and recommendations for practice and suggestions for further studies.

5.2 Summary

The general objective of this study was to examine the effect of organizational strategic resources on the performance of deposit taking SACCOs in Kenya. The specific objectives of this study were to; assess the effect of financial resources on the performance of deposit taking SACCOs; determine the effect of human capital on the performance of deposit taking SACCOs in Kenya; establish the effect of technological resources on the performance of deposit taking SACCOs; examine the effect of physical resources on the performance of deposit taking SACCOs and to evaluate the moderating effect of firm size on the relationship between organizational strategic resources and the performance deposit taking SACCOs in Kenya.

5.2.1 Effect of Financial Resources on Performance of Deposit Taking SACCOs

From descriptive statistics, the study found that the main source of funds in SACCOs is members' contributions, and that timely release of funds influences service delivery and operations. The chief accountants and the finance departments ensured that funds in the SACCOs are released on a timely manner. To ensure timely release of funds, the study established that SACCOs prepare monthly expenditure plans. In addition, the study found that SACCOs have enough/adequate financial resources to finance different

activities and to cater for repairing and maintaining physical assets such as office furniture and equipment; to remunerate staff and to buy additional physical assets. The study found that SACCOs were not entirely financed by sale of shares and rarely combined both borrowed funds and members contributions in their long term financial plans. The study also found that SACCOs rarely borrowed external funds for onward lending to members.

From correlation analysis, the study found that there is a positive relationship between financial resources and the performance of deposit taking SACCOs in Kenya. Regression analysis showed that financial resources have positive and statistically significant effect on the deposit taking SACCOs in Kenya. The study established that a unit improvement in financial resources would lead to an improvement in the performance of deposit taking SACCOs in Kenya. In relation to the challenges facing financial resource in SACCOs, the study found that they experienced inadequacy of funds, long budget approval process, lack of investment policy, poor debt collection outcomes, low interest rates, money laundering, poor saving culture, failure of some members to repay loans, high interest rates on loans, poor loan recovery, embezzlement of funds, inadequate funds to remunerate staff competitively and poor financial records.

5.2.2 Effect of Human capital on Performance of Deposit Taking SACCOs

The descriptive statistics results showed that staff in SACCOs had the knowledge required in the evaluation of members' credit worthiness and the technical knowledge required in management of members' funds. In addition, all the staff in the SACCOs had experience in their specific departments and also had training programs to increase staff knowledge. Additionally, the study established that the staffs in the SACCOs were excellent in problem solving and decision making. The study found that deposit taking SACCOs recruit staff who had been working in the specific areas for a long duration of time. Also, all employees in the SACCOs put physical effort in their work, were excellent in communication and always focused on achieving set organization goals. Further, the SACCOs matched the numbers of staff depending on the available workload

and had low employee turnover. The study revealed that each of the departments in most of the SACCOs had adequate staff, and rarely increased the number of staff every year.

From the correlation analysis, the study found that there is a positive relationship between human capital and the deposit taking SACCOs in Kenya. Regression analysis results show that human capital has positive and a statistically significant effect on the performance of deposit taking SACCOs in Kenya. The study established that a unit improvement in human capital would lead to an improvement in the performance of deposit taking SACCOs in Kenya. The challenges related to human capital resources in the deposit taking SACCOs in Kenya include low staff morale, negative cultural beliefs, unavailability of flexible workforce, low staff remuneration, high employee (labor) turnover, under staffing, resistance to change, inconsistent performance appraisals and lacked human resource departments to professionally manage staff issues. Also cited was lack of a requirement for relevant skills set for those charged with governance of deposit taking SACCOS at Board of Directors level.

5.2.3 Effect of Technological Resources on Performance of Deposit Taking SACCOs

From descriptive statistics, the study established that most of the deposit taking SACCOS in Kenya had adopted mobile banking for member's deposits and withdrawals to increase their customers' convenience. In addition, mobile banking services in the SACCOs were found to be reliable and secure and the SACCOs provided agency services from commercial banks mobile money companies. The study established that the use of information management system improved efficiency in service delivery, reduced cost of service delivery and improved efficiency in running the operations of the SACCOs. The study found that management in SACCOs had moderately invested in ATMs to improve operational performance. In addition, SACCOs moderately offered automated teller machines' services in collaboration with other financial institutions. Further, ATM terminals are moderately monitored to minimize down time which could

cause loss on ATM productivity. The SACCOs had sparingly or moderately established automated teller machines in different parts of the country.

According to the findings of the correlation research, technical resources have a favorable link with deposit-taking SACCOs in Kenya. The regression findings revealed that technology resources had a favorable and statistically significant impact on deposit-taking SACCOs performance in Kenya. The study found that a unit improvement in technological resources would lead to an improvement in the performance of deposit taking SACCOs in Kenya. The study found that a unit improvement in technological resources would lead to an improvement in the performance of deposit taking SACCOs in Kenya. The challenges related to technological resources in the deposit taking SACCOs in Kenya comprised of obsolescence and systems failure, cyber security threat, machine failure, lack of reliable mobile network, and downtime in connectivity linking branches and headquarters. Others are high cost of upgrading systems and slowness in accepting technological changes. Inadequate department budgets to purchase sufficient supporting equipment and as well as to purchase and install automated teller machines were cited as challenges too.

5.2.4 Effect of Physical Resources on Performance of Deposit Taking SACCOs

From descriptive statistics, the study revealed that SACCOs provided adequate computers, stationery in the offices, printers and printing papers. The offices had adequate ventilations to make staff comfortable and adequate space for running all operations. In addition, tables, chairs and cabinets in the SACCO were adequate and well maintained. SACCOs had agronomic chairs which moderately improve on staff physical being and mental health. The SACCOs had motor vehicles to ensure easier movement of staff members, though they were reported not to be adequate. Further, a few SACCOs owned the land on which their offices were built.

Correlation analysis revealed that physical resources have a positive relationship with the performance of deposit taking SACCOs in Kenya. From the regression analysis, the

study established that physical resources had a positive and statistically significant effect on the performance of deposit taking SACCOs in Kenya. The results showed that a unit improvement in physical resources would lead to an improvement in the performance of deposit taking SACCOs in Kenya. The challenges related to physical resources in the deposit taking SACCOs comprised of inconveniences from power interruptions and blackouts, high cost of building and motor vehicles acquisition, fast asset depreciation, escalating rents, use of old computer systems, inconvenient office locations, other utility interruptions, noise and air pollutions, ICT infrastructure and lack of modern office facilities.

5.2.5 Effect of Strategic Organizational Resources on Performance of Deposit Taking SACCOs

From regression analysis, the study found that combined strategic organizational resources (financial resources, human capital, technological resources and physical resources) could explain 26.3 per cent of the performance of deposit taking SACCOs in Kenya. The study also found that in the combined model financial resources had a statistically significant effect on performance of deposit taking SACCOs. In addition, human capital had a statistically significant effect on the performance of deposit taking SACCOs. Further, the result indicated that physical resources had a positive and statistically significant effect on the performance of deposit taking SACCOs. However, technological resources had no statistically significant effect on the performance of deposit taking SACCOs.

The study also found that Human capital had the highest and most significant effect on the performance of deposit taking SACCOs, followed by financial resources and physical resources. Technological resources had no significant effect on the performance of deposit taking SACCOs in the combined regression model. This may be because the availability and effectiveness of technological resource depends on financial resources and human. If the staff have no knowledge, skills and experience in the utilization of technological resources, then it will not have an impact on performance. In addition, the

adoption of technology involves procuring hardwares (computers) and softwares (systems) and hence the need for adequate financial resources.

5.2.6 Moderating Effect of Firm Size on the Relationship between Strategic Organizational Resources and Performance of SACCOs

The descriptive statistics results show that the members of SACCOs have been increasing over the years and the brand value of the SACCOs had been improving over the years too. The study found that the top management in the SACCOs met with staff to explore how they could attract new members to invest in the organization. The study revealed that total assets in the SACCOs have been increasing and that most of the SACCOs possessed quality assets. In addition, the SACCOs extended loyalty benefits to their most valued members and the product and service cost in the SACCOs had been increasing. Additionally, the SACCOs sparingly recruited new staff annually to meet workload demands. In addition, the number of employees promoted to senior positions had moderately been increasing over the years.

The correlation analysis results showed that firm size had a positive relationship with the deposit taking SACCOs' performance. From regression results, the study found that firm size had a positive and statistically significant moderating effect on the relationship between organizational strategic resources and performance of deposit taking SACCOs in Kenya. The study found that a unit improvement in firm size would lead to a 0.274 improvement in the performance of deposit taking SACCOs. Step-wise regression analysis showed that the introduction of firm size in the regression model led to an increase in r-squared (from 0.263 to 0.332), showing that firm size moderated the relationship between strategic organizational resources and the performance of deposit taking SACCOs. The challenges related to firm size in the deposit taking SACCOs included sluggish capital growth, lack of nationwide branches, limited range of financial products, low membership, member dormancy, competition from other financial institutions, slow staff promotion pace and challenges of costly brand enhancement.

5.3 Conclusions

5.3.1 Effect of Financial Resources on Performance of Deposit Taking SACCOs

This study concludes that financial resources have positive and statistically significant effect on the deposit taking SACCOs' performance in Kenya. This implies that an improvement in financial resources would lead to an improvement in the performance of deposit taking SACCOs' performance. The study found that indicators of financial resource such as steady source of funds, adequacy of funds and timely release of funds affect deposit taking SACCOs' performance in Kenya.

5.3.2 Effect of Human capital on Performance of Deposit Taking SACCOs

The study also concludes that human capital has positive and a significant effect on the deposit taking SACCOs' performance in Kenya. This implies that an improvement in human capital would lead to an improvement in deposit taking SACCOs' performance. The study revealed that the indicators of human capital such as adequacy of trained staff, skills and experience affect deposit taking SACCOs in Kenya.

5.3.3 Effect of Technological Resources on Performance of Deposit Taking SACCOs

The study further concludes that technological resource had a positive and significant effect on the deposit taking SACCOs' performance in Kenya. This implies that an improvement in technological resources would lead to an improvement in the performance of deposit taking SACCOs' performance. The study revealed that the indicators of technological resource, which include mobile banking, presence of automated teller machines and management information system, affect the performance of deposit taking SACCOs.

5.3.4 Effect of Physical Resources on Performance of Deposit Taking SACCOs

In addition, the study concludes that physical resources have a positive and significant effect on the deposit taking SACCOs' performance in Kenya. This implies that an improvement in physical resources would lead to an improvement in deposit taking SACCOs' performance. The study found that the quality and general condition of physical resource such as office furniture, office equipment and buildings and land affect the performance of deposit taking SACCOs.

5.3.5 Moderating Effect of Firm Size on the Relationship between Strategic Organizational Resources and Performance of SACCOs

Further, the study concludes that firm size has a significant moderating effect on the relationship between organizational strategic resources and deposit taking SACCOs' performance in Kenya. This implies that an improvement in firm size would lead to an improvement in the relationship between organizational strategic resources and deposit taking SACCOs' performance. The study found that number of staff, number of members and total assets affect the performance of Savings and Credit Cooperative Societies.

5.4 Recommendations

This section presents recommendations related to policy and practice on deposit taking Savings and Credit Cooperative Societies in Kenya.

5.4.1 Recommendations for the Government and Policy Makers

The study revealed that firm size in terms of total assets and number of members affects the performance of deposit taking SACCOs. This study recommends policy formulation by policy makers and SASRA on the total assets requirement and the minimum optimal number of members' required for the licensing of SACCOs. Besides setting policy

framework for total assets, SASRA should formulate policies on credit risk management.

The study also recommends member participation in enactment of laws on deposit taking SACCOs. This will ensure that operational problems and emerging challenges are taken into account.

This study recommends that SACCO policy formulators should look into ways of boosting Saccos' asset and membership by encouraging mergers or even acquisitions. This will boost the capacity of Saccos to sustainably meet member expectations and to compete effectively in the financial credit market.

5.4.2 Recommendations for Management of Deposit Taking SACCOs

The study found that SACCOs rarely borrowed funds to provide loans to the members. This study therefore recommends that the management of SACCOs should come up with ways of obtaining cheap loans from local and international investors so as to increase their loan portfolio and consequently their profitability and service to members.

The study revealed that timely release of finances considerably affected performance of deposit taking SACCOs. It is therefore recommended that the management of Saccos, finance managers and chief accountants should carry out and approve budgets and budget reviews on a timely basis to facilitate regular release of finances for smooth and efficient service delivery.

The study found that the SACCO sector was experiencing high loan delinquency rates. Credit managers in various SACCOs in Kenya should seek to obtain adequate collaterals for loans advanced to members to help in the reduction of loan delinquencies and loan defaults.

The findings indicated that many deposit taking SACCOs had huge backlogs of loan applications which they could not process due to inadequate funds to advance to borrowers. It is therefore recommended that the management of SACCOS should incentivetise their members and customers to increase their savings and deposits with them. This could be achieved through favorable interest rates and bonus schemes.

In addition, many SACCOs did not have well skilled personnel in their respective roles due to absence of clear human resource development policies. It is recommended that human resource departments in Saccos should have clear human resource training and development policies. It is further recommended that SACCOs should more often use training experts and personnel in training their staff on key concepts in sectors like financial management, loan appraisal, security and customer service.

The study established that job promotions were not very regular in deposit taking SACCOs as more than one fifth of the SACCOs had not promoted employees to senior positions. Being one of the non-financial rewards that ensure employee motivation and retention, the study recommends that the management of deposit taking SACCOs in Kenya should come up with human resource policies that guide job promotion.

The findings indicated that SACCOs were experiencing resistance to change in regard to fast adoption of technology. It is therefore recommended that change management strategies (training of staff, effective communication and resource allocation) and adequate budgetary allocations to the ICT department should be adopted as means of addressing such resistance.

The study established that more than one quarter of the deposit taking SACCOs were not providing agency services for commercial banks and mobile money companies. The study found that the adoption of technological resource affects the performance of SACCOs positively. This study therefore recommends that the management of SACCOs should consider as a strategic measure partnering on agency basis with commercial banks and mobile money companies as added value services to their members.

5.4.3 Recommendations for Shareholders

While it is the work of the SACCOs management to ensure that they adopt technology (ATMs, mobile banking and agency banking), members also have a responsibility to utilize them so as to improve efficiency in service delivery. SACCO members should therefore be encouraged to utilize online platforms in loan applications; use mobile banking to make deposit in their accounts and pay loans as well as use agency banking to pay their bills. This is even more urgent during the ongoing period of COVID 19 pandemic.

It was found that there were skill gaps in members elected to Boards of Directors to provide leadership and governance to the SACCOs. It is recommended that members are adequately educated on the need to elect leaders who have demonstrated possession of critical governance skills.

5.4.4 Recommendations for Sacco Societies Regulatory Authority

The study found that non participatory changes in regulatory policies (SARSA strict regulation) were negatively affecting the performance of SACCOs. The study therefore recommends that the government should consider reviewing SASRA regulations to make them more favorable to SACCOs in terms of membership requirements, capital requirements and liquidity requirements and in particular accounting for loan delinquency provisions where incomes of members follow cyclical patterns like in coffee and tea growing agricultural areas.

It also recommends that there should be policy guidelines on the minimum qualifications and background of person eligible to serve both in the Boards and top management of Saccos. It's further recommended that, the regulators should seek to have strict laws and regulations to deter employers and other institutions who fail to remit deductions on time.

The study showed that there were not adequate rules and guidelines to ensure that only competent and skilled persons with relevant knowledge were elected to the Boards of Sacco Societies. It is recommended that the regulators design clear policy guideline to ensure competent governance in Saccos.

5.4.5 Suggestions for Further Studies

This study was conducted on the effect of organizational strategic resources on the performance of deposit taking SACCOs in Kenya. The main focus was deposit taking SACCOs, hence the findings of this study cannot be generalized to non-deposit taking SACCOs. There are only 174 deposits taking SACCOs in Kenya registered and regulated by SASRA, while there over 5000 non deposit taking SACCOs spread out in the counties (Cooperative Alliance of Kenya, 2019). This study did not cover this category of SACCOs which are economically significant through provision of financial access to millions of other members. The study therefore suggests further studies to be conducted on the effect of organizational strategic resources on the performance of non-deposit taking SACCOs in Kenya.

The study found that the strategic organizational resources, which include financial resource, human capital, technological resource and physical resource, could only explain 26.3% of the performance of deposit taking SACCOs in Kenya. This study therefore suggests research on other factors affecting the performance of deposit taking SACCOs in Kenya. These could be cultural factors, geographical factors, urban/rural economic and demographic factors, and even county/national enabling policy support.

In addition, this study was mainly quantitative in nature and collected data using questionnaires only. The study suggests that further studies should be conducted on organizational strategic resources and performance of SACCOs in Kenya using qualitative research methods, collecting data using key informant interviews and focused group discussions. This study looked at organizational strategic resources and performance of SACCOs from the perspective of employees and management. The

study therefore suggests that future studies should look at strategic resources and performance from the perspective of customers and other stakeholders.

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APPENDICES

Appendix I: Introduction Letter

Michael Mutua Kiswili,

Jomo Kenyatta University of Agriculture and Technology,

P.O Box 62000 – 00200

Nairobi,

19th December, 2018

General Manager

P.O. Box …….

Nairobi, Kenya.

Dear Sir/Madam

RE: PERMISSION FOR DATA COLLECTION

I am a student at Jomo Kenyatta University of Agriculture and Technology, pursuing Doctor of Philosophy in Business Administration (Strategic Management Option). I am supposed to conduct a research that will solve a particular problem in my field of specialization for the award of the Doctor of Philosophy in business administration. Hence, I will conduct a research to examine the effect of organizational strategic resources on the performance of deposit taking SACCOs in Kenya.

I therefore request for permission to collect data in your institution. Any information that will be provided will be used strictly for academic purposes.

Yours Faithfully,

Michael Mutua Kiswili

Appendix II: Questionnaire

INTRODUCTION AND FILLING INSTRUCTIONS

The questionnaire is structured to collect information from the finance managers, property managers, human resource managers and ICT managers in Deposit taking SACCOs in Kenya. The main aim of this study is to examine the effect of organizational strategic resources on the deposit taking SACCOs in Kenya. The data collected will be handled with confidentiality and with academic professionalism.

PART A: Demographic Information

1. What is your highest level of education? (Please tick inside the bracket)

School Certificate	[ ]	College Diploma	[ ]
Undergraduate	[ ]	Masters	[ ]
Doctorate	[ ]		

Others, (please specify) …….

2. How long have you been working in deposit taking SACCO? (Please tick inside the bracket)

Less than a year ago	[ ]	Between 1 and 5 years	[ ]
Between 6 and 15 years	[ ]	Above 15 years	[ ]

3. In which category do you belong to?

Human Resource Manager	[ ]	ICT manager	[ ]
Chief Accountant	[ ]	Finance Manager	[ ]

PART B

SECTION I: PERFORMANCE OF SAVINGS AND CREDIT COOPERATIVE SOCIETIES

4. Kindly indicate you level of agreement with the following statements on the performance of your deposit taking SACCO. Please tick (√) the appropriate answer. Where SD represents strongly disagree, D represents disagree, N represents neutral, A represents agree and SA represents strongly agree.

Statements	**SD**	**D**	**N**	**A**	**SA**
i. Cost of service delivery is low					
ii. Delivery time in the organization is low					
iii. The waiting time in service delivery is low					
iv. Our organization ensures the members gets value for money					
v. The turnaround time in the organization is low					
vi. The organization offers reliable services					
vii. The organization ensures that the services are responsive					
viii. The organization has ability to deliver the promised service in a consistent and accurate manner.					
ix. Our organization ensures that customers are					

satisfied

x. Customers are satisfied with the services they recieve from the organization

xi. Customers are satisfied with the timeliness in service delivery

xii. Customers show satisfaction with cost of service delivery

xiii. The process in service delivery is characterized by clarity and simplicity

5. Kindly indicate the challenges faced with reference to the performance of your deposit taking SACCO
   i. ……
   ii. ……
   iii. ……
6. Suggest ways of improving the performance of your deposit taking SACCO
   i. ……
   ii. ……
   iii. ……

SECTION II: FINANCIAL RESOURCE

7. Kindly indicate you level of agreement with the following statements on financial resources in your deposit taking SACCO. Select on a statement by ticking (√) appropriately. Where SD represents strongly disagree, D represents disagree, N represents neutral, A represents agree and SA represents strongly agree.

Statements	**SD**	**D**	**N**	**A**	**SA**
i. The main source of fund in our SACCO is members contributions					
ii. Our SACCO annually borrows external funds to lend to members					
iii. Our SACCO combines both borrowed funds and members contributions					
iv. Our SACCO is financed by sale of share					
v. There are always available funds in the SACCO to finance different activities.					
vi. The SACCO has adequate funds to buy physical assets					
vii. The SACCO has adequate funds to remunerate staff					
viii. The SACCO has enough financial resources to cater for repairing and maintaining physical assets such as office stationaries					
ix. The management of the SACCO ensures timely release of funds to different departments					

x. The chief accountant and the finance department ensure that funds are released in a timely manner

xi. Timely release of funds influences service delivery and operations in the SACCOS

xii. Our SACCO prepares a monthly expenditure plan so as to ensure timely release of fund

8. Kindly indicate the challenges faced with reference to financial resources in your deposit taking SACCO.
   i. ……
   ii. ……
   iii. ……
9. Suggest ways of improving financial resources allocation in your deposit taking SACCO
   i. ……
   ii. ……
   iii. ……

SECTION III: HUMAN CAPITAL RESOURCE

10. Kindly indicate you level of agreement with the following statements on human capital in your deposit taking SACCO. Select on a statement by ticking (√) appropriately. Where SD represents strongly disagree, 2 represents disagree, 3 represents neutral, 4 represents agree and 5 represents strongly agree.

Statements	**SD**	**D**	**N**	**A**	**SA**
i. There are enough staff in each of the departments in our organization					
ii. Our organization has low employee turnover					
iii. Our organization has been increasing the number of staff every year					
iv. Our SACCO match the numbers of staff depending on the available workload					
v. Staff in the organization have the technical knowledge required in management of members' funds					
vi. Staff in the organization have the knowledge required in the assessment of members' credit worthiness					
vii. Staff in the organization are excellent in communication					
viii. Staff in the organization are excellent in problem solving and decision making					

ix. Our organization has training programmes to increase staff knowledge

x. Our organization recruits staff who have been working in specific areas for a long duration of time

xi. All staff in our organization have experience in their specific departments

xii. All employees are always focus in achieving the set organization goals

xiii. All staff in our organization put physical effort in their work

11. Kindly indicate the challenges faced with reference to human capital in your deposit taking SACCO
    i. ……
    ii. ……
    iii. ……
12. Suggest ways of improving human capital in your deposit taking SACCO

    ……

    ……

    ……

SECTION IV: TECHNOLOGICAL RESOURCE

13. Kindly indicate your level of agreement with the following statements on technological resource in your deposit taking SACCO. Select on a statement by ticking (√) appropriately. Where SD represents strongly disagree, D represents disagree, N represents neutral, A represents agree and SA represents strongly agree.

Statements	**SD**	**D**	**N**	**A**	**SA**
i. Our organization has adopted mobile banking for member's deposits and withdrawals					
ii. Our organization provides agency services for commercial banks mobile money companies					
iii. The use of mobile banking increase customer's convenience					
iv. Mobile banking services in our SACCO are reliable and secure					
v. Our organization offers automated teller machines' services with other financial institutions					
vi. Our organization has established automated teller machines in different parts of the country					
vii. In our SACCO, ATM terminals are continuously monitored to prevent down time which cause loss ATM productivity.					
viii. The management in our organization have					

invested in ATM to improve on operational performance

ix. Our organization has a managements system used in running the operations

x. The use of a management system improves efficiency in service delivery

xi. The use of a management system reduces cost of service delivery

xii. The use of a management information system reduces the duration of time taken to approve a loan to a member

14. Kindly indicate the challenges faced with reference to technological resource in your deposit taking SACCO
    i. ……
    ii. ……
    iii. ……
15. Suggest ways of improving technological resource in your deposit taking SACCO
    i. ……
    ii. ……
    iii. ……

SECTION V: PHYSICAL RESOURCE

16. Kindly indicate you level of agreement with the following statements on physical resource in your deposit taking SACCO. Select on a statement by ticking (√) appropriately. Where SD represents strongly disagree, D represents disagree, N represents neutral, A represents agree and SA represents strongly agree.

Statements	**SD**	**D**	**N**	**A**	**SA**
i. Our organization has modern tables, chairs and cabinets					
ii. The tables chairs and cabinets in our organization are adequate					
iii. The tables chairs and cabinets in organization are well maintained					
iv. Our SACCO has agronomic chairs which improve on staff physical being and mental health					
v. Our organization has motor vehicles to ensure easier movement of staff members					
vi. Our organization has provided adequate computers					
vii. Our organization has provided adequate printers and printing papers					
viii. There is enough stationary in our offices					
ix. Our organization owns the land on which our					

offices are built

x. Our organization owns the building hosting it

xi. Our offices have adequate space for running all operations

xii. Our offices have adequate ventilations to make staff comfortable

17. Kindly indicate the challenges faced with reference to physical resources in your deposit taking SACCO
    i. ……
    ii. ……
    iii. ……
18. Suggest ways of improving to physical resources in your deposit taking SACCO
    i. ……
    ii. ……
    iii. ……

SECTION VI: FIRM SIZE

19. Kindly indicate you level of agreement with the following statements on firm size in your deposit taking SACCO. Select on a statement by ticking (√) appropriately. Where SD represents strongly disagree, D represents disagree, N represents neutral, A represents agree and SA represents strongly agree.

Statements	**SD**	**D**	**N**	**A**	**SA**
i. The number of staff in our organization has been increasing over the years					
ii. Our organization recruit new staff annually to meet the workload demands					
iii. The number of employees promoted to senior positions have been increasing over the years					
iv. The shareholders in our SACCO has been increasing over the years					
v. The management in our SACCO meets with staff so as to explore how they can encourage new members to invest in the organization.					
vi. Our organization extend loyalty benefit to the most valued members					
vii. Our organization possess quality assets					
viii. The total assets in our organization has been increasing					
ix. Product and service cost in our organization has					

been increasing

x. The brand value of our organization has been improving over the years

20. Kindly indicate the challenges faced with reference to your firm size

i. ……

ii. ……

iii. ……

21. Suggest ways of improving your SACCOs size

i. ……

ii. ……

iii. ……

Appendix III: Data Extraction Tool

Year	Total net income	Total Assets	Dividend	ROI	Liquidity Ratio	Number of staff	Number of members
2012							
2013							
2014							
2015							
2016							
2017							

Appendix IV: Deposit Taking SACCOs

No.	Name of SACCOS	County	Postal Address, Telephone numbers and Email Address	Location
1	All Churches Sacco Society Limited	Kiambu County	P.O. Box 6957-01000,Thika Tel: 067 20314 Cell phone: 0711-431-590 info@acsacco.co.ke allchurchesfosa@gmail.com	Pushpa Plaza, Kwame Nkrumah Rd, Thika Town
2	Azima Sacco Society Limited	Kiambu County	P.O. Box 1124-01000, Thika Tel: 067-21162 Cell phone: 0714-479-004 info@kenyacannerssacco.co.ke info@azimasacco.co.ke	Kenya Canners Sacco Centre, Wabera street, Thika Town
3	Fariji Sacco Society Limited	Kiambu County	P.O. Box 589-00216, Githunguri. Tel: 020-2017407 Cell phone: 0727-398-699 saccokcdf@yahoo.com	Diplomat House, Githunguri Town
4	Fundilima Sacco Society	Kiambu County	P.O. Box 62000-00200,Nairobi	JKUAT Building, Thika Road, Juja Town

	Limited		Tel: 067-52311 020-2356 669/70 Cell phone: 0721-564-136fundilimasacco@yahoo.com info@fundilimasacco.co.ke P.O. Box 896-00216,Githunguri		
5	Githunguri Dairy Sacco Society Limited	Kiambu County	Tel: 020-2015 366, Cell phone: 0723-400-611 info@gdcsacco.co.ke P.O. Box 224-00222,		Githunguri Dairy Farmers Co-op Society Bldg. Market Street
6	Good Faith Sacco Society Limited	Kiambu County	Uplands Cell phone: 0711-263-398 info@goodfaithsacco.co.ke P.O. Box 1767-00232,Ruiru		Kiwa House, Uplands Road
7	Jacaranda	Kiambu County	Cell phone: 0725-976 129 jacarandafosa@yahoo.com P.O. Box 669-00219,Karuri		Finance House, Ground Flr. Ruiru Town
8	Joinas	Kiambu County	Tel: 020- 2071289		Kanja Hse, Limuru-Banana Road

			Cell phone: 0721-175-585 rkiambaadairysacco@gmail.com info@joinassacco.com P.O. Box 8017- 00300,Nairobi Tel: 020-2089715 020- 813738	Empower House, Githurai 45 off Thika Road
9	Kingdom	Kiambu County	Cell phone: 0720-838 422 info@kingdomsacco.com kingdomsacco@yahoo.com P.O. Box 268-00900,Kiambu Tel: 066-2022052	Mapa House 8th Floor , Biashara Street, Kiambu Town
10	K- Unity	Kiambu County	Cell phone: 0722-677-472 info@unityfinance.co.ke info@k-unity.co.ke P.O Box 575-00902,Kikuyu	Ondiri House Kikuyu Town
11	NRS	Kiambu County	Cell phone: 0724-256-190 info@nrssacco.co.ke	

			P.O. Box 1842-01000,Thika Tel: 06730480	Whiteline Building, Commercial Street, Thika Town
12	Orient	Kiambu County	Cell phone: 0712-911-888 0722-258-566 info@orientsacco.co.ke	
13	Tai	Kiambu County	P.O. Box 718-00216,Githunguri Tel: 020-2014150 020-2010334taisacco@yahoo.com info@taisacco.coop	Tai Plaza, Uplands/Limuru Road
14	Dimkes Sacco Society Limited	Kiambu County	P.O. Box 886-00900,Kiambu Town Tel: 020-66-22521 dimkessacco@yahoo.com	Bishop Magua House, Kiambu/Ndumberi Road, Kiambu Town.
15	Capital Sacco Society Limited	Meru County	P.O. Box 1479-60200,Meru Tel: 064-31446 Cell phone: 0708-843-287/8 info@capitalsacco.co.ke	MACCU Bldg, Kenyatta Highway, Meru Town
16	Centenary Sacco Society Limited	Meru County	P.O. Box 1207-60200,Meru	Intercity Centre, Kenyatta Avenue, Meru Town Centre

			Tel: 064-32236 Cell phone: 0715-467 290 0720-826-908 info@centenarysacco.org P.O. Box 353-60600,Maua Town	Dhabiti Sacco Building, Kanuni Road, Maua Town
17	Dhabiti Sacco Society Limited	Meru County	Tel: 064-21104/5/6/ Cell phone: 0701-911-765 dhabitisacco@yahoo.com P.O. Box 3192-60200,Meru	Imenti Complex, Main Stage, Meru Town
18	Imenti	Meru County	Tel: 064-3130025 064-3131481imentisacco@yahoo.com P.O. Box 251-60202,Nkubu	Kathera House, Embu-Nkubu Road
19	Kathera	Meru County	Cell phone: 0727-338-314 katherasacco@gmail.comnexussacco@gmail.com P.O. Box 469-60600,Maua	MMH Plaza, KanuniMeru Road
20	MMH	Meru County	Cell phone: 0750-602-545mmhsacco@gmail.cominfo@mmsacco.com P.O. Box 493-60600,Maua	Nyambene Arimi Plaza, Maua-Kanuni Road
21	Nyambene Arimi	Meru County		

			Tel: 064-21154/21346 Cell phone: 0723-308-380 nyarimisacco@yahoo.com	
22	Siraji	Meru County	P.O. Box Private Bag, TimauCell: 0704-566-922 info@sirajisacco.com	NKM Place, Nanyuki –Meru Highway
23	Smart Champion	Meru County	P.O. Box 64-60205,Githongo, Meru Cell phone: 0713-951-182 0732-395-148info@smartchampionsacco.co.ke smartchampionsacco@gmail.com	Muranene Bldg, near Githongo Chief's Camp, Githongo Trading Centre
24	Solution	Meru County	P.O. Box 1694-60200,Meru Tel: 064-32192 Cell phone: 0728-787-972 0734-321-924 saccomru@yahoo.com	Meru Mwalimu Plaza, Gakoromone Road
25	Times- U	Meru County	P.O. Box 310-60202,Nkubu Tel: 064-5051191 info@timesusacco.or.ke	Along KCB Street, Nkubu Town
26	Yetu	Meru County	P.O. Box 511-60202,NkubuTel: 064-5057399	Sacco Building, Nkubu-Kathera Road

			Cell phone: 0720-808-912 yetusacco@yahoo.com P.O Box 95011-80104, Mombasa.		Bandari Sacco Plaza, Moi Avenue, Mombasa City
27	Bandari Sacco Society Limited	Mombasa County	Cell phone: 0724-002 525 0735-336-685 Info@bandarisacco.co.ke		
28	Jitegemee	Mombasa County	P.O. Box 86937-80100,Mombasa Cell phone: 0728-700-800info@jitegemeesacco.co.ke		Kizingo House, Kaunda Road, Mombasa City
29	KMFRI	Mombasa County	P.O. Box 80862-80100,Mombasa Tel: 020-8021560/1 Ext.169 Cell: 0724-699-276 kmfrisacco@kmfrico.ke info@kmfrisacco.co.ke ceo@kmfrisacco.co.ke		Texas Towers, off Nyali, Reef road Ratna square, Mombasa City
30	Mafanikio	Mombasa County	P.O. Box 86515-80100,Mombasa Tel: 041-2495809		Khoja Flats, Moi Ave, Mombasa City

			Cell phone: 0734- 402-011 info@mafanikiosacco.com P.O. Box 95372-80104,Mombasa Tel: 041-2220124	Mombasa Port Plaza, Mwakilingo Road, Mombasa City
31	Mombasa Port	Mombasa County	Cell phone: 0736-506-656 0725-238-367 Info@msaportsacco.co.ke P.O. Box92503-80102,Mombasa	Akamba Homecraft House, Baraka Obama Road, Mombasa City
32	Uchongaji	Mombasa County	Tel: 041-3432635 Cell: 0710-680-674 uchosacco@rocketmail.com P.O. Box 83256-80100,Mombasa	Ralli House, Nyerere Avenue, Mombasa City
33	Washa	Mombasa County	Tel: +254-41-2220169, Cell phone: 0770-802-338 0797-690-900 info@washasacco.co.ke washa.sacco@yahoo.com	

34	Afya Sacco Society Limited	Nairobi County	City	P.O. Box 11607 - 00400, Nairobi. Tel: 2223970/2223961 info@afyasacco.com	Afya Centre, Tom Mboya Street, Nairobi City Centre
35	Airports Sacco Society Limited	Nairobi County	City	P.O. Box 19001-00501Nairobi Cell phone: 0715-843-888 0717-243-119info@airportsacco.co.ke	KAA Complex, J.K.I.A. Nairobi City
36	Ardhi Sacco Society Limited	Nairobi County	City	P.O. Box 28782-00200,Nairobi Tel: 020 2644888/9, Cell phone: 0722-209-851, 0735-337-725 0722-835-926 info@ardhisacco.com	Off Thika Road, Survey of Kenya Field Hqs Bldg, Nairobi City
37	Asili Sacco Society Limited	Nairobi County	City	P.O Box 49064, 00100, Nairobi. Tel: 020-2630244 2699305, Cell phone: 0722-472-823, 0733-472-823	Asili Co-op Centre, Ngara Road, Nairobi City

				asilisacco@yahoo.cominfo@asilisacco.coop P.O. Box 278-00200,Nairobi Tel: 0202214406/10 Cell phone: 0733-330-045	KTDA Plaza, Off Moi Ave/Ronald Ngala Street. Nairobi City
38	Chai Sacco Society Limited	Nairobi County	City		
39	Chunasacco Society Limited	Nairobi County	City	info@chai-sacco.co.ke P.O. Box 30197-00100,Nairobi Tel: 318262/88/65/70/340989	Engineering Dept. UON, Harry Thuku Rd, Nairobi City
40	Comoco Sacco Society Limited	Nairobi County	City	chunasacco@yahoo.comchunasacco@uonbi.ac.ke P.O. Box 30135-00100,Nairobi Tel: 020-650794 Cell phone: 0795-059-792	KAPU Bldg, Lusaka Road, Nairobi City
41	Elimu Sacco Society Limited	Nairobi County	City	info@comocosacco.co.ke P.O. Box 10073-00100,Nairobi Cell phone: 0727-013 047,0739-559-354	Elimu Hse, Mubiru Road, South B, Nairobi City
42	Hazina	Nairobi County	City	info@elimusacco.com P.O Box 59877-00200,Nairobi Tel: 020-2722106/2719098 info@hazinasacco.or.ke	Hazina Sacco Bldg. Kibera Rd, Off Ngong Rd. Nairobi City

43	Jamii	Nairobi County	City	P.O. Box 57929-00200,Nairobi Tel: 552477 Cell phone: 0712-852-762info@jamiisacco.com	Jamii Sacco Court, Mukenia Rd, South B, Nairobi City
44	Kenpipe	Nairobi County	City	P.O. Box 314-00507,Nairobi Tel: 550971 Cell: 0710-600-999/0735-700-971 kenpipe.sacco@kpc.co.ke info@kenpipesacco.com	Kenpipe Plaza, Nanyuki Road Nairobi City
45	Kenversity	Nairobi County	City	P.O. Box 10263-00100, Nairobi Tel: 020-8002371/2 Cell phone: 0715-114 454/0736-710 906 kenversity@gmail.com info@kenversitysacco.coop	Mizpah House, Kahawa Sukari Street, Near Kenyatta University, Nairobi City
46	Kenya Bankers	Nairobi County	City	P.O. Box 73236-00200,Nairobi Tel: 020-2720231/35 Cell phone: 0735-338-800,0723-555-000	Kenya Bankers Sacco Centre, 3rd Ngong Avenue, Nairobi City.

				kenyabankers@kbsacco.co.ke	
47	Kenya Police	Nairobi County	City	P.O. Box 51042-00200,Nairobi Cell phone: 0709-825-000	Kenya Police Sacco Plaza, Ngara Rd, Nairobi City
48	Magereza	Nairobi County	City	info@policesacco.com P.O. Box 53131-00200,Nairobi Tel: 2244138/342701/2248614 Cell phone: 0716-315-155	Mageso Chambers, Moi Avenue, Nairobi City
49	Maisha Bora	Nairobi County	City	magereza@magerezasacco.coop P.O. Box 72713-00100,Nairobi Tel: 020 65566 14/18	Unilever Kenya Office, Commercial St, Industrial Area, Nairobi City
50	Metropolitan	Nairobi County	City	P.O. Box 5684-00100,Nairobi Tel: 020-8007509/02011391 Cell: 0721-703126	Chai House, Koinange Street
51	Miliki	Nairobi County	City	info@metrosacco.co.ke P.O. Box 43582-00100,Nairobi Tel: 020-2655 453 Cell phone: 0736-956 434 0722-940-015	Miliki Sacco Bldg, Kinyanjui Rd, Kawangware, Nairobi City

				Info@milikisacco.org P.O. Box 62641-00200, Nairobi Tel: 020-29560000/ Cell phone: 0709-898-000 mwalimu@mwalimunationalsacco.coop akiao@mwalimunationalsasacco.coop	Mwalimu Towers, Upper Hill, Nairobi Town
52	Mwalimu National	Nairobi County	City		
53	Mwito	Nairobi County	City	P.O. Box 56763-00200,Nairobi Tel: 020-3505209 info@mwitosacco.coop	Mwito House, Desai Road, Nairobi City
54	NACICO	Nairobi County	City	P.O. Box 34525-00100,Nairobi Tel: 020-2250025 info@nasicosacco.coop	NACICO Plaza, Landhies Road, Nairobi City
55	Nafaka	Nairobi County	City	nacicocoop@gmail.com P.O. Box 30586-00100, Nairobi Tel: 020-780417	Nairobi Silos Complex, Outer-Ring Road, Nairobi City

				Cell phone: 0728-102-039 nafakasaccosociety@yahoo.com	
56	NSSF	Nairobi County	City	info@nafakasacco.com P.O. Box 43338-00100,Nairobi Tel: 0254-020-2724003 info@nassefusacco.coop	NSSF Building (Block C), Bishops Road, Nairobi City
57	Nation	Nairobi County	City	info@nssfsacco.com P.O. Box 22022-00400,Nairobi Tel: 020-2223247/3288571, 2624040 nationsacco@ke.nationmedia.com	Cambrian Hse, Moi Avenue, Nairobi City CBD
58	Nyati	Nairobi County	City	P.O Box 7601-00200,Nairobi Tel: 020-556166 Cell phone: 0720-542-064 0722-705-432	Oddysey PlazaMukoma Rd, Nairobi City
59	Ollin	Nairobi County	City	info@nyatisacco.com P.O. Box 83-10300,Kerugoya	Ollin Sacco Complex, Total-DC Rd. Off, Kutus-Karatina Highway

				Tel: 060-21582 Cell phone: 0724-256-461 info@ollin.co.ke	
60	Safaricom	Nairobi County	City	ollinsacco@yahoo.com P.O. Box 2392-00606,Nairobi Tel: 020-4273228/72 Cell: 0722-003-228	Safaricom Care Centre, Waiyaki Way, Nairobi City
61	Sheria	Nairobi County	City	Sacco@safaricom.co.ke P.O. Box 34390-00100,Nairobi Tel: 020-2010396,2710412/16 Cell: 0722-745-156 sheriasacco@yahoo.com	Sheria Sacco Hse, Off Matumbato St, Nairobi City
62	Shirika	Nairobi County	City	bosa@sheriasacco.coop P.O. Box 43429-00100,Nairobi Tel: 020-3740625 Cell phone: 0734-897-817 info@shirikasacco.co.ke	Shirika Co-op Hse, Kipande/Ngara Rd, Nairobi City

				shirikasaccosociety@gmail.com P.O Box 16-00507Nairobi Tel: 020-2406081	Nature House, Nairobi CBD, Tom Mboya Street, Nairobi City
63	Shoppers	Nairobi County	City	Cell phone:0730-780-000, 0725-943-018, 0722-568-875 info@nakusacco.com	
64	Stima	Nairobi County	City	info@nakusacco.com P.O. Box 75629-00200Nairobi Tel: 020-3751292 Cell phone: 0703-024-024,0724-253-918	Stima Sacco Plaza, Mushembi Road, Nairobi City
65	Taqwa	Nairobi County	City	info@stima-sacco.com P.O Box 10180-00100,Nairobi Tel:209/10328 Cell: 0786-332-211, 0702-332-211	Jamia Plaza, 3rd floor Kigali Street, Nairobi Town
66	Telepost	Nairobi County	City	Taqwasacco1@gmail.com P.O Box 49557-00100,Nairobi Tel: 2222711/2 Cell phone: 0775-825-019, 0774-315-096, 0727-	City Square Post Office (5th Flr), Nairobi City

				438-688	
67	Tembo	Nairobi County	City	info@telepostsacco.com P.O. Box 91-00618,Ruaraka Tel: 020-2603334 Cell phone: 0722-992-469 info@tembosacco.co.ke	Tembo Complex, Mukima Drive, Nairobi City
68	Ukristo Na Ufanisi Wa Anglicana	Nairobi County	City	tembo@wananchi.com P.O. Box 872-00605, Nairobi Cell phone: 0720-339-673 0720-201-187 ukristonaufanisi@yahoo.com	ACK Emmanuel Church Riruta, Chief's Road, Nairobi City
69	Ukulima	Nairobi County	City	ukristonaufanisi@coop.com P.O. Box 44071-00100,Nairobi Tel: 020-2785000 Cell phone: 0720-179-991 info@ukulimasacco.coop	Ukulima Cooperative House, Haile Selassie Avenue, Nairobi City

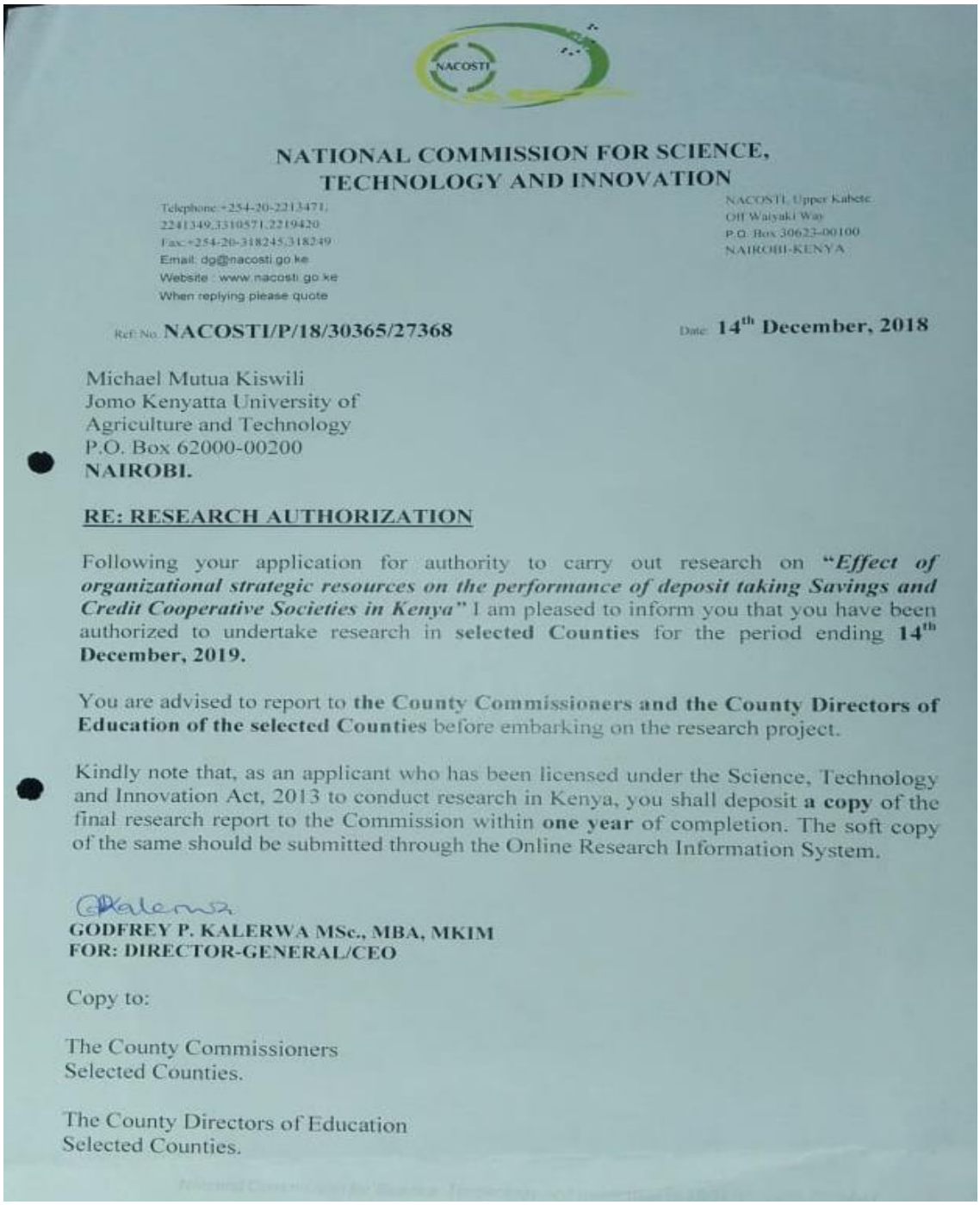
70	Unaitas	Nairobi County	City	P.O. Box 38721 – 00100,Nairobi Cell phone: 0721-244-139, 0775-530-310 info@unaitas.com	Cardinal Otunga Plaza, Kaunda street, Nairobi City
71	Un-Sacco	Nairobi County	City	P.O. Box 30552-00100,Nairobi Tel: 020-7622700/1 unsacco@unon.org	UN-SACCO Building, UN Avenue, Gigiri, Nairobi City
72	Wana-Anga	Nairobi County	City	P.O. Box 34680-00100,Nairobi Tel: 020-3571108 info@wana-anga.co.ke	Meteorological Hqs, Ngong Road, Nairobi City
73	Wanandege	Nairobi County	City	P.O. Box 19074-00501,Nairobi Tel: 020-3535851/2/3 Cell phone: 0722-208-557, 0735-353-565 info@wanandegesacco.com	Wanandege Plaza, Old North Airport Road, Nairobi City
74	Waumini	Nairobi County	City	P.O. Box 66121-00800, Nairobi Tel: 4441708/38 Cell phone: 0734-666-226, 0728-606-059info@wauminisacco.com	Waumini House, Chiromo Rd, Westlands, Nairobi City
75	Harambee	Nairobi County	City	P.O Box 47815 - 00100,Nairobi	Harambee Co-op. Plaza, Haile Selassie Ave. Nairobi City

			Tel: 020-2212513, 2212514 Cell phone: 0705-200 200,0705-888-999 info@harambeesacco.com P.O. Box 2973-00200Nairobi. Tel: 020-2246383	Development House, Moi Avenue, Nairobi City
76	Ufanisi	Nairobi City County	Cell: 0712-690 660 0738-690-660 info@ufanisisacco.co.ke	
77	2nk Sacco Societylimited	Nyeri County	ufanisi@agrifinance.org P.O. Box 12196 -10109,Nyeri Tel: 061-2030340 Cell phone: 0721-374-310 0718-521-774	Kang'aru Corner house, next to Post Bank, Nyeri Town
78	Baraka Sacco Society Limited	Nyeri County	nnksacco@gmail.comm P.O Box 1548-10101, Karatina. Tel: 061-72174barakasaccosociety@yahoo.com	Baraka Sacco Bldg, Off-Kiaruhiu, Karatina Town
79	Biashara Sacco Society Limited	Nyeri County	P.O. Box 1895-10100, Nyeri.	Biashara Sacco Bldg. Kimathi Way, Nyeri Town

			Tel: 061- 2034206 Cell: 0722-557 188 biasharasacco@yahoo.com P.O. Box 1836-10101,Karatina Tel: 061-72274 Cell: 0727-013-987 eneasacco@gmail.com P.O. Box 1939-10100,Nyeri Tel: 0612-034282,030759, Cell: 0725-349-343/0722-662-714info@newfortissacco.com info@nyeriteachers.com Nyeriteacherssacco@yahoo.com P.O. Box 1649-10100,Nyeri Tel: 020-30275 Cell: 0724-635-463 info@taifasacco.co.ke info@taifasacco.coop	Kiangararu Bldg. Head office Rhino House Fosa Office Karatina Town Nyeri Teachers Sacco Bldg. Off Kenyatta Road, Nyeri Town NCU Building, Gakere Road
80	Enea Sacco Society Limited	Nyeri County		
81	New Fortis	Nyeri County		
82	Taifa	Nyeri County		

83	Wakulima Commercial	Nyeri County	P.O. Box 232-10103,Mukurweini Tel: 020-3594698 wakulimadairysacco@yahoo.com ino@wakulimasacco.co.ke	Mukurweini –Nyeri Road , Mukurweini Town
84	Wananchi	Nyeri County	P.O. Box 910-10106, Othaya Tel: 061-3152248/3152174 Cell: 0722-299 265 info@wananchi-sacco.co.ke info@wananchisacco.coop	Wananchi Sacco Building, Nyeri-Othaya-Kiriani Road

Appendix V: NACOSTI Research Authorization Letter



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349,3310571,2219420
Fax: +254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/18/30365/27368**

Date: **14th December, 2018**

Michael Mutua Kiswili
Jomo Kenyatta University of
Agriculture and Technology
P.O. Box 62000-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Effect of organizational strategic resources on the performance of deposit taking Savings and Credit Cooperative Societies in Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **selected Counties** for the period ending **14th December, 2019.**

You are advised to report to **the County Commissioners and the County Directors of Education of the selected Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioners
Selected Counties.

The County Directors of Education
Selected Counties.

Appendix VI: NACOSTI Research Permit

THIS IS TO CERTIFY THAT:
MR. MICHAEL MUTUA KISWILI
of JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY , 0-200 Nairobi,has been permitted to conduct research in *Kiambu , Meru , Mombasa , Nairobi, Nyeri Counties*

on the topic: *EFFECT OF ORGANIZATIONAL STRATEGIC RESOURCES ON THE PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KENYA*

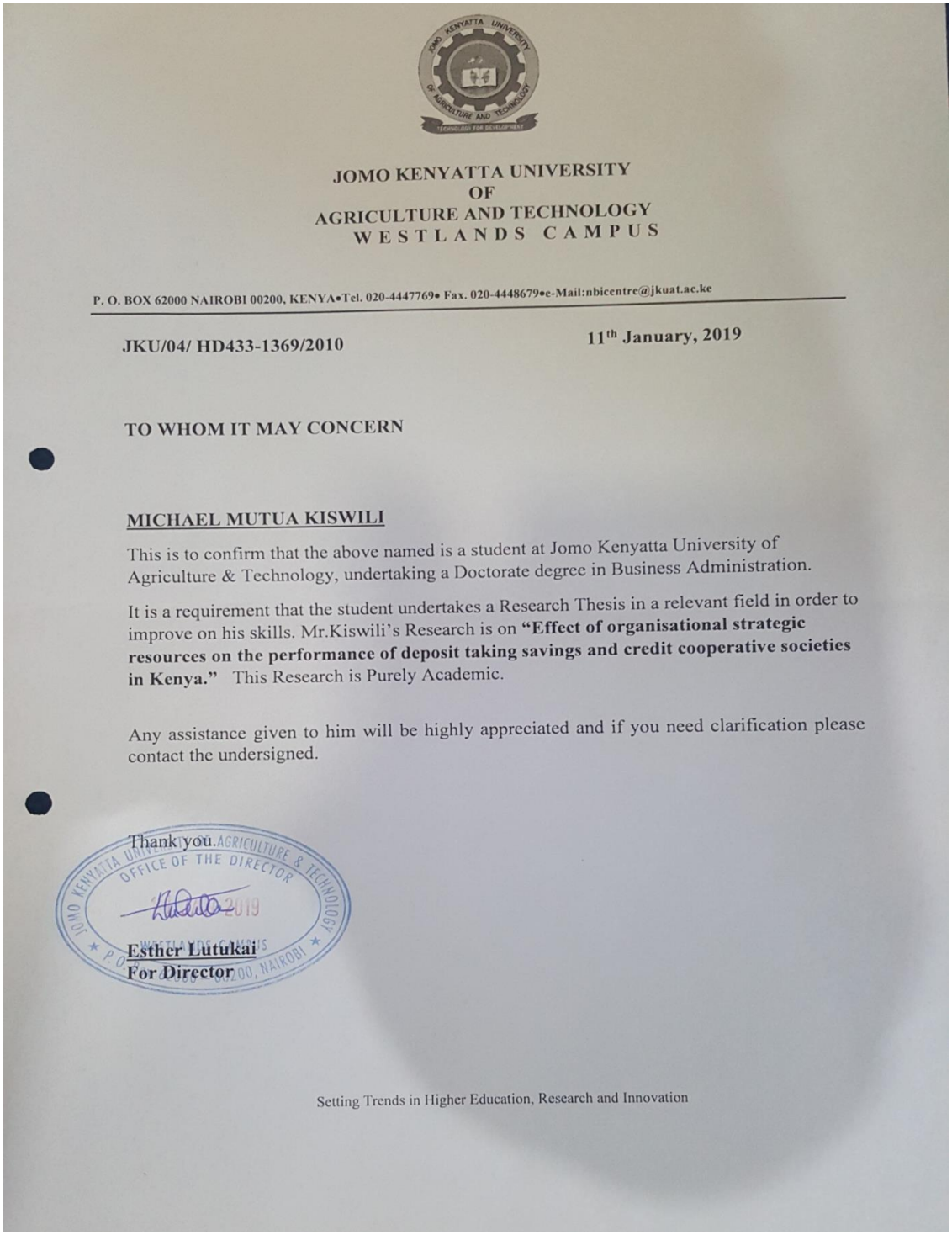
for the period ending:
14th December,2019

Permit No : NACOSTI/18/30365/27368
Date Of Issue : 14th December,2018
Fee Recieved :Ksh 2000

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation

Appendix VII: Data Collection Letter from JKUAT



JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY
WESTLANDS CAMPUS

P. O. BOX 62000 NAIROBI 00200, KENYA•Tel. 020-4447769• Fax. 020-4448679•e-Mail:nbicentre@jkuat.ac.ke

JKU/04/ HD433-1369/2010

11th January, 2019

TO WHOM IT MAY CONCERN

MICHAEL MUTUA KISWILI

This is to confirm that the above named is a student at Jomo Kenyatta University of Agriculture & Technology, undertaking a Doctorate degree in Business Administration.

It is a requirement that the student undertakes a Research Thesis in a relevant field in order to improve on his skills. Mr.Kiswili's Research is on **"Effect of organisational strategic resources on the performance of deposit taking savings and credit cooperative societies in Kenya."** This Research is Purely Academic.

Any assistance given to him will be highly appreciated and if you need clarification please contact the undersigned.

Thank you.

JOMO KENYATTA UNIVERSITY OF AGRICULTURE & TECHNOLOGY
OFFICE OF THE DIRECTOR
2019
WESTLANDS CAMPUS
P.O. BOX 62000, NAIROBI

Esther Lutukai
For Director

Setting Trends in Higher Education, Research and Innovation