

**CAPACITY BUILDING, TRANSFORMATIONAL LEADERSHIP AND  
PRODUCTIVITY OF SUGAR COMPANIES IN KENYA**

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## **DECLARATION AND APPROVAL**

### **Declaration**

I declare that this thesis is my original work and has not been presented for the conferment of a degree or award of diploma in this or any other University.

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## **DEDICATION**

I dedicate this thesis to my lovely wife Emily Keter and my children, Avi Kiprop and Fidel Bridges for supporting me in my study.

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## ABSTRACT

Emerging issues such as Covid-19, inflation, cheap imports, and political instability have affected most manufacturing firms, requiring them to adopt internal capacity building. Sugar firms in Kenya are among those facing challenges such as resource constraints and management issues, which have resulted in poor production. To address these challenges, it was essential to develop unique capabilities through capacity building, coupled with appropriate transformative leadership, to enhance the productivity of sugar companies. The goal of this study was to evaluate capacity building, transformational leadership, and productivity of sugar companies in Kenya. In particular, the study assessed the relationship between employee capacity building and productivity; determined the relationship between knowledge management capacity building and productivity; determined the relationship between innovation capacity building and productivity; and examined the relationship between organizational capacity building and productivity of sugar companies in Kenya. The study further assessed the moderating effect of transformational leadership on the relationship between capacity building and the productivity of sugar companies in Kenya. The study was grounded in several theories, including human capital theory, institutional theory, theory of action, theory of change, dynamic capability theory, and transformational leadership theory. The study adopted a positivist research philosophy and correlational research designs. Census of all the target population of 218 managers working in 8 sugar companies in Kenya was used in the study. Primary data was gathered through the use of a structured questionnaire. Using Cronbach's alpha coefficient, the internal consistency of the research tool was evaluated; ideally, a threshold of 0.7 and above was used. Similarly, the instrument's validity was enhanced through an extensive literature review and consultation with human resource subject experts. Mean and standard deviation was utilized with frequencies as descriptive statistics. The data used inferential statistics which includes Pearson correlation and multiple linear regression analysis. The findings revealed that employee capacity-building practices, achieved through training, induction, motivation, and employee retention, positively impacted the productivity of sugar companies. However, periodic reviews on employee motivation were lacking. Moreover, knowledge management capacity-building showed a statistically significant relationship with productivity, suggesting a need to enhance knowledge management systems, retrieval, and acquisition in sugar companies. Similarly, innovative capacity-building was found to have a significant relationship with productivity, driven by improved ICT resources and innovation in product packaging, though process and production innovation required improvement. Organizational capacity-building also positively correlated with sugar company productivity, attributed to flexible organizational structures and operational restructuring. Upgrading organizational systems with modern technology was deemed necessary. Additionally, transformative leadership moderated the relationship between capacity-building and organizational productivity, emphasizing the importance of leadership in enhancing organizational performance. Ultimately, the study concluded that there was a statistically significant relationship between capacity-building and organizational productivity, moderated by transformative leadership.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

COMESA	Common Market for East and Southern Africa
HRD	Human Resource Development
ECB	Employee Capacity Building
ICB	Innovation Capacity Building
IDRC	International Development Resource Centre
IOA	Institutional and Organizational Model
KMCB	Knowledge Management Capacity Building
NACOSTI	National Commission for Science, Technology and Innovation
OCB	Organizational Capacity Building
OP	Organization Productivity
OPA	Organizational Performance Assessment
SACCOs	Saving and Credit Co-operative Societies
SMEs	Small and medium-sized enterprises
SPSS	Statistical Package for Social Sciences

## OPERATIONAL DEFINITION OF TERMS

- Capacity building** Is the process that entails strengthening and developing skills, abilities, instincts and resources the organization needs to survive, grow and adapt to the ever-changing world (Ihemeje & Afegbua 2020). This study refers to capacity building as a measurable improvement in an organization's ability to achieve its objectives through employee capacity building, knowledge management, capacity building, innovation capacity building and organizational capacity building.
- Employee capacity building** It is a process that organizations use to add value to their workforce, such as providing career training, professional education, and growth opportunities, among others (Sholesi, 2021). According to this study, employee capacity development refers to the activities carried out by the sugar companies to enhance employee ability to perform better. These activities include: team building, training and motivation.
- Innovation Capacity Building** It refers to the process by which organizations generate innovative outputs (Esterhuizen, Schutte & Du, 2012). This refers to the adoption of innovation to create a competitive advantage in the firm.

<b>Knowledge Management Capacity Building</b>	It is defined as creating the ability for an organization to manage knowledge in a manner that enhances learning and to deal with today's situations and future challenges and opportunities in a manner that enhances organizational objectives (Ghoneim & Brown, 2011). In this study knowledge management is characterized by the utilization of knowledge resources in terms of knowledge sharing, knowledge creation and knowledge acquisition.
<b>Organizational capacity building</b>	This is the process of strengthening internal organizational structures, systems and processes, management, leadership, governance and overall staff capacity to enhance organizational, team and individual productivity (Rummler, 2012). In this study it implies organizational restructure, system and strategies
<b>Productivity</b>	It is the actual output of a particular institution which is measured against the planned output which can be in form of achieved goals or objectives (Munyao, 2019). The current study measured organisational productivity in terms of employee performance, the number of yields, the quality of a product and efficiency in production.
<b>Transformational leadership</b>	It refers to a leadership trait where a leader inspires and motivates followers leading to creativity in the organization (Mirkamali,

Shateri & Uzbashi, 2013). In this study transformational leadership was characterized by how inspirational, creative and motivational.



# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Overview**

This section comprises of the background of the study , statement of the problem, general and specific objectives, research hypotheses, justification, significance, the study scope, limitations, and research assumptions.

### **1.2 Background to the Study**

Globally, there is an increase in complexity in business as a result of emerging issues such as COVID-19, inflation, and political instability that have affected the production of organizations (Widodo, 2022). Political instability as is the case of the Russia-Ukraine war has affected the supply and demand of most firms. As a result, firms should look for capacity building strategies that improve the innovativeness, skills, knowledge, and capability of their human resources (Moussa & El-Arbi, 2020).

Capacity building strengthens human resource, innovation, knowledge management, abilities, skills and organization in a dynamic business environment (Kwamboka, 2018). In this way, firms are able to develop a more robust internal business environment that can withstand turbulence from external environment. Capacity building in developed nations in Europe, Asia and USA has assisted organizations in addressing challenges. Asian nations are able to compete with Western counterparts by using employee capacity building. Most of these

countries follow family and social norms in running their organizations rather than the capitalist approach.

In Pakistan, bank employees are motivated through capacity building (Ahmad, Farrukh, & Nazir, 2015). This has enabled most of the firms to improve employee capabilities. In China, according to Stöcklin (2015) integration of the capacity building in the organization has enhanced human resource and created cohesiveness and goal-oriented focus with transformational leadership support. Russian firms have deployed innovation capacity building, however, challenges of corruption and regulation have negatively affected their performance (Chadee & Roxas, 2013).

Innovation capacity building has enhanced improvement in innovation performance in Turkey, according to Sözbilir (2018). This has enabled organizations to be more effective in a dynamic and competitive business environment. Widodo (2022) asserts that the complexity and dynamic microeconomic challenges arising from Covid-19 and industrial technology disruption in Indonesia require a transformational leader. A transformative leader should utilize their competencies to transform the organization through organizational capacity development to achieve its goals productively, efficiently and effectively.

Due to availability of financial resources in USA, among other developed nations, firms have been able to achieve superior products as well as improve management capacity (Flink & Chen, 2021) hence, human resource and organizational capacity building is crucial to the development of the organization for superior productivity. In Germany, a study by Rommerskirch-Manietta et al. (2021) asserts that organizational capacity building not only affects staff capacity but also the organization's working environment. The strategies,

structure and system in place require restructuring in organizational capacity building to improve the working environment.

In Africa, human resource development capacity has been deployed in Nigerian firms which have improved training, leading to enhanced performance (Sholesi, 2021). Training plays a significant role in employee capacity building especially in enhancing the skills of African companies' employees in a competitive environment. In Nigeria, employee capacity building as asserted by Okoh & Onoriode (2019) has led to the improvement of competencies and skills among employees in financial firms. Capacity building of human resource also enables proficiency among top management, hence enhancing the performance of the firms. Similarly, Nwankwo, Olabisi, and Onwuchekwa (2017) assert that the performance of SACCOs in terms of employee effectiveness, efficiency, productivity and quality of service delivery was significantly improved by the adoption of capacity-building strategies.

Capacity building in Nigeria as alluded to by Chukwurah, Uzor, Iwuno, & Chukwueloka (2020) also plays an important role in employee productivity. Capacity building affected the employees' commitment, productivity level, effectiveness and efficiency (Ajetomobi, 2021). The trend in Nigeria focuses on using capacity building to improve productivity, employee performance, effectiveness, efficiency, employee commitment and quality of product or service delivery.

In Kenya, Obor (2017) asserts that human resource development is a crucial aspect of employee capacity building. Innovative capacity building has been utilized in the teaching and learning process in public secondary schools (Mwawasi, 2014). Otibine (2016) opines that capacity building remains a crucial aspect in enhancing organization capability,

knowledge and expertise leading to high performance. Capacity building has been shown to improve timeliness resulting in productivity. However, there is a gap in research associated with capacity building.

Onyango, Wanjere, Egessa & Masinde (2015) assert that performance in sugar companies in Kenya is associated with organizational capabilities. Similarly, Maiyo (2020) argues that the performance of a sugar firms was measured using customer satisfaction, market share, new production and product quality. There are sugar firms that are public and private which were licensed by Kenya Sugar Board after complying with relevant institutional requirements (Bowman, 2020). These organizations have managerial autonomy, which is explicitly and implicitly recognized before creation of sugar companies.

The efficiency of the public sugar and the government at large is influenced by the ability to make enterprise decisions without the influence of the political environment and ministerial bureaucracy. However, some government control and direction are inevitable since the government is exclusively responsible for performance of public sugar companies. This is contrary to private sugar companies which enjoy high autonomy since they are managed by private individuals. It is only regulated by a government agency for purposes of licensing, quality assurance and trade regulation.

There is a need to develop capacity-building mechanisms that are directed towards the achievement of the objectives and the core business mandate of the sugar firms (Tabares, 2021). According to Munyao (2019), capacity building is an improvement of an organization's capability to deliver the intended results effectively. Capacity development is an internal change process shaped by adopting and reacting to external forces to ensure the

adaptability of the organization to changes in the business environment. It involves efficient employee capacity building, organizational capacity building, innovation capacity building and knowledge management capacity building. Change, Linge, and Sikalieh (2019) opine that efficiency in capacity building, leading to improved organizational performance depends on the nature and quality of top management support.

Transformational leadership is crucial in turning around poor-performing firms to be profitable based on their capabilities of inspiring and installing creativity and motivation in their followers. According to Gitongu, Kingi, and Uzel (2016), transformational leadership style influences strategic priorities, creativity, innovativeness as well as the performance of the organization. Riemenschneider, Burney, and Bina (2023) argue that the level of employee performance relies on both their actual skills and their motivation. Modern theories of leadership tend to emphasize the nature of the interaction between the leaders and followers, not forgetting the situational context.

Transformational leadership has been adopted as moderating variable in numerous studies. Mohammed and Zakari (2021) show that the transformational leadership style can be used as a moderator for entrepreneurial education on performance. It has an insignificant effect on the relationship, but in a study by Nyacanchu, Joel, and Bonuke (2017) transformational leadership moderates dynamic capability on the performance of manufacturing firms in Nairobi County. Similarly, it has been found to moderate the relationship between governance and the performance of insurance firms in Kenya. The role of moderating effect of transformational leadership was examined whether transformational leader has a role in enhancing the capacity building hence increasing productivity or not.

The study is based on the premise that a transformational leader would inspire, motivate and instill creativity that would enable the institution to effectively apply capacity building practices, resulting in an increase in productivity. Hence there is need to examine the moderating effect of transformative leadership on the relationship between capacity building and performance of sugar companies in Kenya. Sugar firms were chosen as objects of this study following a drop in production volumes, leading to a number of firms closing and others in debts.

### **1.2.1 Capacity Building**

Capacity building is the process of developing and enhancing the skills, knowledge, and resources of individuals, organizations, and communities to improve their ability to achieve their goals and objectives effectively and efficiently (Conte, 2023). By combining solid management, robust governance frameworks, and a commitment to measuring and attaining results, an organization's capacity to fulfil its goals can be significantly improved. According to Otom (2017), capacity development entails specific efforts to strengthen organizational structures to efficiently accomplish its mission and objectives (Ihemeje & Afegbua 2020).

An efficient human resource management function is a requirement for any well-running state parastatal. The human resource and development department is responsible for developing the employees' capacity to handle the organization's day-to-day activities efficiently. The department also ensures efficiency in the change management processes and that tasks are completed promptly.

Employee capacity building involves developing the skills and capabilities of individuals within an organization. This includes providing training, coaching, mentoring, and other forms of support to help employees improve their performance and productivity (Johnson, Ennis-Cole, & Bonhamgregory, 2020). Employee capacity building also requires communication and public relations skills with the staff and strategic planning. IHEMEJE and AFEGBUA (2020) in the study of capacity building and public service delivery reveal that an organization's employee capacity development entails assessing the demand for personnel, acquiring the right set of skills and knowledge required in the organization, training and development, knowledge management, and building teams to carry out responsibilities efficiently.

Employee capacity building envisages the training, motivating and development of team building to improve the skills, knowledge and capability of human resource within a firm (Gekonde, Nyamboga & Nyarohoo, 2014). In a study of capacity building, Okoh & Onoriode (2019) suggested an improvement in capacity building in human resource through training to impact skills and competencies in the financial institution in Nigeria.

In Lebanon a study by Mouallem and Analoui (2014) concluded that besides training, motivation, employee involvement, reward management, performance appraisal as well as recruitment and selection are some of the areas that employee capacity building can be enhanced to ensure the right skills and competencies are available in the firm. A research on human resource by Obor (2017), the study findings revealed that human resource

development is an important aspect of employee capacity building which affected firms' performance.

Safkaur and Sagrim (2019) state in their study of human resource capacity and organizational financial performance that education and training of human resource positively influence the financial performance of a firm. Sholesi (2021) used employee training through adopting effective training methods and techniques improves the performance of a firm in the study of human resource development. Training remain an important aspect of employee capacity building concept that not only motivate but impact skills that is necessary for efficiency and effective in service delivery.

Knowledge management capacity building focuses improving an organization's ability to capture, store, and use knowledge effectively. This includes developing systems and processes for sharing knowledge, creating knowledge management policies and procedures, and promoting a culture of knowledge sharing and learning (Lam, Nguyen, Le, & Tran, 2021). Knowledge management capacity building is important in ensuring there is a collaborative approach to innovation in organizations (An, Deng, Chao and Bai, 2014). This knowledge management facilitates knowledge sharing, knowledge acquisition and knowledge creation. Empirical information from Alaarj and Mohamed (2017) on knowledge management capacity showed that knowledge management is a crucial aspect in ensuring that knowledge is not lost but stored in the institution with a mechanism to create, acquire and share existing knowledge.

Patwary, et al. (2023) in the study of knowledge management practices and employee performance found that capacity buidling culture is necessary moderating effect on the



relationship between knowledge management practices and employee performance. Bharadwaj, Chauhan & Raman (2015) ascertained that knowledge management capabilities include infrastructure, structure, and culture which are required in knowledge management processes. These comprise creation/acquisition, storage, dissemination, and application. The effectiveness of knowledge management practices remain crucial in enhancing the efficiency of the organization.

Innovation capacity building involves developing an organization's ability to innovate and create new ideas, products, and services. This includes promoting a culture of creativity, providing resources and support for research and development, and creating systems and processes for managing and implementing new ideas (Azevedo, Schlosser, & McPhee, 2021). Innovation capacity building remains a crucial aspect of growth, especially in product innovation, process innovation as well as the adoption of ICT capability. Chadee & Roxas (2013) indicated that innovation capacity building is hindered by corruption, rules and regulation resulting in a negative impact on performance. There is a need for legislation that supports the adoption of ICT as well as innovation in different countries.

Innovation capacity is affected by internal and external learning in the organization (Brix, 2018). Sözbilir (2018) reviewed innovation capacity building and showed that through enhancing education where firms with innovation capacity building had better innovation performance as compared to others. Forés and Camisón (2010) also examine innovation capacity building and showed that there is need for firms to improve internal learning capacity as well as absorptive capacity in the firms which was mediated by innovation capacity building on business performance.

Organizational capacity building emphasized improving an organization's overall effectiveness and efficiency. This includes developing strategic plans, improving governance structures and processes, strengthening financial management and accountability, and building partnerships and collaborations with other organizations. Organizational capacity building as asserted by Widodo (2022) plays an important role in strengthening the organizational structure, strategies and system to be robust in a complex and uncertain business environment. It cannot achieve organizational goals productively, efficiently and effectively without having the right leadership.

Rommerskirch-Manietta et al. (2021) in the study of organizational capacity building, opine that the working environment and staff capacity among other interventions is achieved through organizational capacity building. The role of the organization is to strength the staff by developing appropriate structure, system, strategies and policies that ensure a better working environment.

Evaluation policies according to Hudib & Cousins (2022) are related to organizational evaluation capacity building that is in place in the organization. This implies that policies developed in the organization dictate the capacity-building practices in place. Khaldoun, Nadeen and Long (2019) examined organization capacity building and found that there is an association between organizational capacity building and the scope of the firm.

Widianto, Lestari, Adna, Sukoco and Nasih (2021) examined an organizational capacity building which suggested that necessary for an organization to enable a firm to utilize dynamic capabilities and resources for the purpose of improving the firm's production.

This assists in boosting employee skills, and flexibilities by empowering middle level management to use existing human resource, policies and strategies to enhance the performance of the firm.

### **1.2.2 Transformational leadership**

Transformational leader is a creative leader who inspires followers, motivates employees and is collaborative in nature. These traits remain the focus when looking for a successful leader who motivates employees to improve the performance of the organization (Alseiari, Sidek & Al-Shami, 2019). The traits of a leader influence human resource capabilities resulting in high employee performance. This implies that a transformative leadership style is suitable for enhancing innovation and improvement of human capital leading to a competitive advantage for the firm.

A transformative leader can influence training and development in the organization as revealed by Vasilaki, Tarba, Ahammad, and Glaister (2016). Therefore, transformational leadership plays an important role in employee capacity building and development. From the foregoing, transformational leadership inspires employees to achieve organizational objectives. Razzaq, Sami, Manum, & Hammad (2020) argue that transformational leaders inspire their followers to have a shared vision, mission and purpose. The inspiration goes beyond mission and purpose to enable self-interest for the good of the team. This has a direct or indirect effect on employee productivity leading to organization productivity. Transformational leadership inspires employees to engage in their task resulting in better task performance (Lai, Tang, Lu, & Lee, 2020).

Transformational leaders affect the creativity of their followers since their function leads to the enablement of firms to use dynamic capacities to enhance their performance (Nyacanchu, Joel, and Bonuke, 2017). This enables the transformative leader to moderate the relationship between dynamic capabilities and firm performance. Creativity is required when firms are undergoing problems to bring the solution through firms' capabilities leading to high performance.

Transformational leaders are a source of motivation for their followers. Agile, Okeyo, and Nyambegera (2021) assert that a transformative leader is a source of motivation to the employee through the provision of support, guidance and incentive to encourage the demoralized employee to keep working. In a scenario where there is a poor working environment, the leader becomes supportive and puts effort into improving working conditions. Razzaq, Sami, Manum, & Hammad (2020) in the study of transformational leadership aver that transformational leadership is associated with organizational motivation, commitment and satisfaction of employees at their workplace. This converts to employee productivity as well as organizational performance. Therefore, a transformational leadership style has a moderating effect on the effect of governance on performance.

### **1.2.3 Productivity of Organization**

Productivity is associated with performance in the product-based industry based on quality, quantity, timeliness of production and employee performance. It is directly associated with employee competencies, skills, knowledge, capabilities and leadership to achieve the organizational objective (Carnevale, 2018).

Therefore, productivity which is coined from production is a common word used in production management in the product-based industry. Onyango, Wanjere, Egessa & Masinde (2015) did a study on sugar companies and found that organizational capability significantly affect the performance of sugar companies in Kenya. However, the current study focused on productivity of sugar companies in relation to capacity building. This is similar to Maiyo (2020) who used organization productivity in terms of product quality, new product introduction, market share and customer satisfaction in Sugar Companies. There is a need to explore productivity rather than performance which has been over-exploited by researchers. Otieno (2015) asserts that productivity is normally measured in terms of the quality of service or product, the quantity of product, efficiency in operation or service delivery and employee performance.

Quality of service or product is commonly used in measuring the productivity of a firm. Nwankwo, Olabisi, and Onwuchekwa (2017) measured productivity in relation to capacity-building strategies using quality, effective, and efficient in service delivery. The quality was also used by Chukwurah, Uzor, Iwuno, & Chukwueloka (2020) to measure the productivity of employees in service delivery. Both studies were done in the service industry where capacity building was examined in relation to firm productivity and performance.

In the case of a product-based industry, the quality of products can be used since sugar can be rated with other products as well as total quality control which must be done before distributing to consumers. In some instances employee performance accumulates to the productivity of the organization. Ajetomobi (2021) avers that capacity building has an effect

on employee performance in terms of commitment, productivity level, effectiveness and efficiency.

This indicates that capacity building affects not only employee productivity but also employee effectiveness, efficiency and commitment leading to high employee and organization productivity. Similarly, Green (2016) opines that employee performance significantly affects organizational productivity. Capacity building is associated with the performance of the employee as alluded to by Ahmad, Farrukh, & Nazir (2015). This implies that employee performance has an impact on the overall productivity of the organization.

Efficiency which some time defines timelines in production is important to ensure the timely delivery of products at the cheapest cost possible. Otibine (2016) declares that capacity building is responsible for timeliness in service delivery. In productivity, timeliness is associated with producing the product within the right time frame. Ajetomobi (2021) studied efficiency in service delivery and found out that it entails timeliness within the right cost. Similarly, Nwankwo, Olabisi, and Onwuchekwa (2017) state that efficiency in service delivery was contributed to by capacity-building strategies adopted by Savings and Credit Co-Operative Society (SACCOs) in Nigeria. In the current study sugar companies' productivity is measured in terms of the quality of sugar, the quantity of sugar, timeliness in production and employee productivity or performance.

#### **1.2.4 Sugar companies in Kenya**

Most of Kenya's sugarcane is grown at the coast, and in the western region around Nyando, Migori, Mumias, Busia, and at the coast. Kenya's sugar sector has significantly aided in the

growth of the country. Despite being of utmost importance to the economy, it has continued to perform horribly, causing ongoing production shortfalls. Most of the sugarcane used in Kenyan mills is supplied by roughly 250,000 small-scale sugarcane farmers.

About six million Kenyans depend on the sugar sector for their livelihoods either directly or indirectly, which helps rural household economies, (Kenya National Assembly, 2015). As of 2021, there were eight sugar companies namely West Kenya Sugar Company, Butali Sugar Mills, Kibos Sugar and Allied Industries Limited, Sukari Industries Limited, Transmara Sugar Company, Nzoia Sugar Company, Muhoroni Sugar Company and Chemelil Sugar Factory from ten in 2014 with Mumias Sugar Company and South Nyanza Sugar Company which have closed operations.

The most affected sugar companies are public companies where numerous issues have affected their productivity over the years. From around 635,700 tonnes in 2015 to 491,100 tonnes in 2018, milled sugar production has steadily decreased in recent years. The nation is a net importer of sugar because imports have been rising while domestic consumption is above 900,000 tonnes per year. Even yet, South Sudan, Somalia, and other Common Market for Eastern and Southern Africa (COMESA) nations receive most of Kenya's meagre sugar exports. Marketed sugar is primarily used for domestic consumption, and it generates roughly Kshs. 500 billion annually, hence supporting the sector's significance (Agriculture and Food Authority, 2018).

**Table 1.1:***Sugarcane Production in Kenya*

<b>Sugarcane Production</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Area under sugarcane ('000 ha)	223.6	220.8	191.2	202.4
Area harvested ('000 ha)	77.8	85.8	67.7	73.1
Production of non-contracted farms ('000 tonnes)	1995.8	1816.7	1004.3	1233.1
<b>Average Yield (tonnes/ha)</b>	<b>66.4</b>	<b>62.2</b>	<b>55.3</b>	<b>55.1</b>

Source: Agriculture and Food Authority (2018)

Kenya's sugarcane production has decreased as a result of various issues. It is low at the farm level as a result of inferior seeds from long-maturing varieties, smut disease, expensive input costs, and late payments to farmers. In western Kenya, it takes 18 to 24 months to cultivate sugarcane. Sudan, on the other hand, cultivates cane types that reach maturity in just 14 months. Issues that leads to deficiency in sugar plants include: mismanagement, licence issuance, sugar importers, milling factories, and traders, (Kenya National Assembly, 2015).

Most of the state-owned sugar mills are underutilised and have enormous debt loads. One of the reasons for this is they have outdated, ineffective equipment (Chisanga, Gathiaka, Nguruse, Onyancha, & Vilakazi, 2014). Corrupt sugar barons influence the importation of contraband sugar leading to repackaging and selling of illegal surgar in the Kenyan market.



Besides, lack of professionalism and accountability in management boards, and other business-distorting effects has had a drastic effect on productivity in sugar firms (Kenya Anti-Corruption Commission [KACC], 2010). Despite the majority of the sugar factories having been privatised by the government, they are still in the red because of huge debts, corruption and comparative advantage from external competitors.

### **1.3 Statement of the Problem**

Firms that adopt appropriate capacity building are expected to perform better unlike those that do not. Transformative leaders are seen as catalysts in creation of capacity building resulting to higher performance. Sugar companies have for a long time assisted sugarcane farmers to obtain revenue and employment. It has also provided the government with revenue. There are thirteen sugar companies in Kenya, however, out of thirteen sugar two public and three private have closed operations, leaving only eight sugar companies which are under producing. The closure of the five sugar companies is associated with low productivity resulting in bankruptcy and losses among farmers from unpaid arrears. To add on the existing problems, there is an increase in cost of production making produced sugar to be more expensive as compared to imported sugar from Sudan and the COMESA region (Agriculture and Food Authority, 2018). These inefficiencies might result from poor human resource' ability to draw and maintain the right skills that can propel the productivity of the public sugar organization, so as to mitigate against underfunding from the government, and poor institutional development, among other factors. The study speculate that if the sugar companies adopt capacity building with appropriate transformational leadership practices issue associated with underproductivity would eliminated.

Empirical literature has pointed out inconsistent findings on whether capacity-building practices would work in the Kenyan context since most of the studies have been done in the United States of America and the United Kingdom (Ahmad, Farrukh, & Nazir, 2015). Therefore, there is a need to fill this gap and also examine if such a relationship exists in other contexts, specifically in the African context. This study sought to investigate whether capacity-building practices have a relationship with the productivity of sugar companies in the Kenyan context. It is against this backdrop of limited research study in this area that the study seeks to establish the moderating effect of transformational leadership on the relationship between capacity building and the productivity of sugar companies in Kenya.

#### **1.4 General Objective of the Study**

The main objective of the study is to establish the relationship between capacity building, transformational leadership and productivity of sugar companies in Kenya.

#### **1.5 Specific Objectives of the Study**

- i. To assess the relationship between employee capacity building and productivity of sugar companies in Kenya.
- ii. To determine the relationship between knowledge management capacity building and productivity of sugar companies in Kenya.
- iii. To determine the relationship between innovation capacity building and productivity of sugar companies in Kenya.

- iv. To examine the relationship between organizational capacity building and productivity of sugar companies in Kenya.
- v. To establish the moderating effect of transformational leadership on the relationship between capacity building and productivity of sugar companies in Kenya.

### **1.6 Research Hypotheses**

**H<sub>01</sub>** There is no statistically significant relationship between employee capacity building and productivity of sugar companies in Kenya.

**H<sub>02</sub>** There is no statistically significant relationship between knowledge management capacity building and productivity of sugar companies in Kenya

**H<sub>03</sub>** There is no statistically significant relationship between innovation capacity building and productivity of sugar companies in Kenya

**H<sub>04</sub>** There is no statistically significant relationship between organizational capacity building and productivity of sugar companies in Kenya.

**H<sub>05</sub>** Transformational leadership has no statistically significant moderating effect on the relationship between capacity building and productivity of sugar companies in Kenya

### **1.7 Justification of the Study**

Sugar companies play an important role in Kenya through employment, the market for farm products, source of revenue and source of raw materials. Five public sugar companies are Muhoroni, Mumias, Nzoia, Nyanza and Chemilil.

Out of the five, Mumias and Nyanza sugar companies are currently processing sugar. On the other hand, the eight private sugar companies are Butali Sugar Mills, Transmara Sugar Company, Ole Pito Sugar Company, Sukari Industries Limited, Kwale International Sugar Company Limited, West Kenya Sugar Company, Sony Sugar Company, Kibos Sugar and Allied Industries Limited, and Kisii Sugar Factory. Despite Kenya having a total of 13 sugar companies only eight were functional as of 2021/2022. Two public and three private had closed due to bankruptcy, mismanagement, high cost of manufacturing and cheap sugar imports from the COMESA region.

The firms are responsible for supporting over 250,000 small-scale sugarcane farmers in Nyando, Migori, Mumias and Busia. The closure of the two public and three private sugar industries has affected mainly the farmers who depend on sugarcane farming for their livelihoods. The current study of sugar companies is crucial for the farmers since it provides a necessary recommendation that can be applied to turn around the sugar industry.

### **1.8 Significance of the Study**

The results provided in this study seeks to guide all stakeholders ranging from farmers, government, employees, and buyers to suppliers on capacity building practices that improved the productivity of the sugar industry. The study also considered the role of transformational leadership in turning around the sugar industry. This study recommends solutions to problems that have been associated with poor productivity and ascertain where capacity building and transformational leaders was the cause or not. Therefore, the study looks at how transformational leadership influences the relationship between methods for building capacity and the productivity of Kenyan sugar enterprises.

The results of this study will contribute to knowledge relating to the connection between Kenyan organisational productivity and capacity-building initiatives. The results might be useful in defining the strategies needed to enhance capacity building in different organisations. The findings of this study seek to serve as a tool for modifying corporate strategies and policies to enhance management efficiency. The findings might benefit the top management in both private sector, public sector and the government in making policies aimed at improving the organizational productivity of the less-performing sugar firms.

In addition, other stakeholders such as the public stand to benefit from the study findings, given that all factors that negatively influence the organizational productivity of the sugar organization in the country might be addressed. This is because if the quality of sugar production is enhanced, there might be efficient service delivery leading to citizens' satisfaction, economic growth, and improved living standards for the stakeholders and the public. The results stand to not only assist farmers but also assist employees who are directly employed by the sugar industry to maintain their jobs.

The findings of this study are significant in filling any knowledge gap regarding the relationship between capacity-building strategies and organizational productivity in Kenya. The findings might be of help as they might outline strategies required to improve capacity building in various organizations. Finally, the study aspires to benefit other scholars interested in carrying out a study on capacity-building strategies. Besides acting as additional literature of reference for human resource management practitioners.

### **1.9 Scope of the Study**

The study concentrated on Kenyan sugar companies located in the Western and Nyanza areas. The study's scope was limited to determining how transformational leadership influences the relationship between capacity building and Kenyan sugar firms' productivity. Capacity building remains an important aspect when considering changing the operations of firms with challenges. The study examined not only human resource capacity-building practices but also organizational capacity-building, innovation and knowledge management.

The study examined the relationship between the productivity of sugar firms and the development of human resource capacity, knowledge management ability, innovation capacity, and organisational capacity. The study also evaluated how transformational leadership affects the link between productivity and capacity building. The study was able to address the reasons for the sugar industry's decline, the significance of capacity building for the sector's turnaround, and the requirement for transformational leadership to ensure the effective use of human resource, knowledge management, innovation, and organisational capacity building. The study targeted all the sugar companies in Kenya. The study was conducted in Kenya between January 2022 and May 2023.

### **1.10 Limitations of the Study**

The study's major limitation was unavailability of secondary data. This was because most of information concerning capacity building and transformational leadership is not documented. Therefore, the researcher used questionnaire as the primary source of data since it is easy and economical in collecting large size of data.

The study also faced restriction in accessing productivity related secondary data since it invades company's privacy policies. This resulted in the adoption of questionnaires to collect all the relevant information. To get around this restriction, the researcher submitted the questionnaire with research permit and assured them that it was only used for academic purposes. The study was limited to biasness and subjectivity of respondents. However, the research attained consent and required the respondents to answer the questionnaires with truth since the data accuracy would assist in providing findings that would assist the organization performance.

### **1.11 Assumptions of the Study**

The current study was based on various assumptions. It assumed that the census represented sugar firms which are still in operation in Kenya as at 2023. Data collection instrument that was used provided reliable, valid, and thus measured the variable of the study and came up with the desired constructs. The study also assumes that there could be other factor that could result to low productivity.

It also assumed that the respondents were able to understand the research questions and gave accurate and honest responses. Questionnaires were filled in time and collected by the researcher within an agreed time frame and thus provided ample time to analyse the data on time.

The study assumed that there are other factors that could affect the productivity of the sugar industry. This factors were recommended for future research and controlled through adoption of regression model.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

In this section, the theoretical framework, review of existing literature, the conceptual framework, and the knowledge gaps of the study are examined.

#### **2.2 Theoretical Framework**

This study is anchored on Human Capital Theory, Institutional Theory, Theory of Action, Theory of Change and Dynamic Capability Theory. The human capital theory concerns the improvement of intellectual capabilities through human resource integration to enable high performance. Institutional theory is instrumental in the institutionalization of human resource, knowledge management, innovation and organization capabilities in the organization.

The theory of action enables capacity building to accomplish a specific task. Hence, it supports the need for human resource, innovation, knowledge management and organizational capacity building. On the other hand, the theory of change support, the need for transformational leadership as well as the contribution of capacity building in transforming the poor-performing organization to be more productive.

Dynamic Capability Theory is necessary to solve deficiencies in action-based and resource-based theories. Organizational structures, decision-making processes, procedural rules, and talents are all part of dynamic capabilities. These are crucial building blocks for developing



organisational, innovative, and knowledge management capacity as well as human resource capacity.

### **2.2.1 Human Capital Theory**

Schultz (1961) first advanced the human capital theory intending to provide value addition to people in a firm. It is a widely accepted economic theory which posits that investment in human capital is critical for economic development and productivity. Human capital refers to the knowledge, skills, and abilities that individuals possess, which can be developed through education, training, and work experience (Galiakberova, 2019). Understanding this theory is meant to contribute to better organizational productivity. Human capital theory suggests that individuals are the most important asset of an organization, and investing in their development and training can lead to increased productivity and economic growth.

The theory regards employees as essential assets to the organization and not costs. Serenko and Bontis (2013) assert that human capital development is necessary because it offers intelligence, skills, and expertise that boost its uniqueness of the firm. The theory also emphasizes the importance of education and training in developing human capital, as well as the need for employers to provide incentives to encourage employees to invest in their own development. Human capital theory further suggests that the value of human capital can be measured by the potential earnings of an individual over their lifetime.

Employee capacity building is a process that organizations use to add value to their workforce, such as by providing career training, professional education, and growth opportunities, among others (Sholesi, 2021). The scholar asserts that human capital theory

has defined methods of quantifying return in human capital investment through training and education which is a crucial concept in employee capacity building.

The theory supports the need for training human capital to enhance skills, knowledge, competencies and experience for higher returns in the organization. Training and development have a direct relationship with knowledge, skills and abilities as attested by human resource capacity building. However, the theory treats human resource as capital that an organization can do or cannot do without. Training and development of human resource is attached to monetary value through training costs and remuneration to achieve organization productivity.

The empirical literature on human capital theory has linked human capital with employee engagement (Mayo, 2012; Ratsameethamachot, 2013). Employee engagement can also be achieved through employee capacity building. Human capital has also been associated with talent development and management (Devine & Syrett, 2014; Thomas, Smith & Diez, 2013). Talent or career development and management assist organizations in retaining desired employees who are productive. Employee capacity building intends to manage existing talent comprising of skills, knowledge and expertise in the organization and reduce job turnover costs. The human capital theory has wide applications which are in agreement with the application of employee capacity building in the organization.

The current study focused on linking employee capacity building with the productivity of the firm. Critics of human capital theory argue that it focuses solely on the economic value of human capital, neglecting the social and cultural factors that can also contribute to development and productivity (Kuzminov, Sorokin, & Froumin, 2019). Additionally, such

critics argue that the theory does not take into account the role of social institutions and structures in shaping opportunities for human capital development.

Hooley (2021) argue that human capital theory places too much emphasis on individualism and ignores the collective nature of productivity and economic growth. Despite these critiques, human capital theory remains highly relevant in the contemporary era of global competitiveness and economic uncertainty. Human capital development is critical for capacity building, as it enables organizations to develop and enhance the skills and knowledge of their employees. Transformational leadership can also be seen as a way to develop human capital, by empowering and motivating employees to improve their skills and capabilities.

Finally, human capital theory has implications for productivity, as organizations that invest in human capital are likely to be more productive and efficient. Human capital is considered an intangible asset owned by some firms that, if well utilized, would benefit the institution. The human capital theory asserts that despite the institution's lack of ownership, the organization can still gain a high level of training and development of its workforce through strategies like human resource development.

Due to the poor productivity of sugar companies in Kenya, there is a need to invest in workforce development through training, team building, and knowledge management. This will enable firms in adopt the culture of human resource development. The theory would form the basis of understanding knowledge management capacity building besides human resource management capacity building as one of the independent variables in this empirical review.

### **2.2.2 Institutional Theory**

John Meyer and Brian Rowan are the primary proponents of the institutional theory in the 1970s (Jepperson & Meyer, 2021). This theory is an approach to understanding firms and management practices as an element of social than economic pressure. The theory considers an institution's social world under structures, rules, and procedures that allow action on set conditions. This theory is popular in the management theory perspective because of its ability to illustrate organizational behaviour that overlooks economic rationality.

The theory emphasizes the importance of legitimacy and conformity to social expectations, and suggests that organizations must conform to institutionalized practices and norms in order to gain legitimacy and survive in their environment (Massi, Rod, & Corsaro, 2021). Institutional theory also suggests that organizations can shape their environment and contribute to the creation of new institutional structures and norms. According to Vayanos and Woolley (2013), institutions assist in explaining the social world because they have in place social orders and gives directions to the social life flow. Therefore, the institution is found within a social context, and acts within the context. Institutions allow social actors within a cognitive framework which facilitates constrained actions. The actions are restrained and governed by rules which sometimes are likely to be invisible.

According to Keohane and Martin (2014), the activities are enabled by permitting actions that are meaningful to the institution's development and thus lead to high productivity. Institutional theory critics argue that it places too much emphasis on conformity and can stifle innovation and change. Critics also argue that institutional theory overlooks the role of power and politics in shaping institutional structures and norms.

Geels (2020) argues that institutional theory is too deterministic and does not adequately consider the agency of individuals and organizations in shaping their own environment. Despite these criticism, institutional theory remains highly relevant in understanding contemporary organizations. Institutional theory has important implications for capacity building, as organizations must understand and conform to institutional norms and expectations in order to gain legitimacy and credibility. Transformational leadership can also be seen as a way to shape institutional structures and norms, by promoting innovative practices and challenging existing norms. Finally, institutional theory has implications for productivity, as organizations that conform to institutionalized practices and norms are likely to be more efficient and effective in achieving their goals.

According to the theory, organizations are affected by pressure from external forces or internal forces. This theory is key to organizational behaviour because it allows an institution to behave responsibly. Institution theory is expected to affect institutional development and organizational productivity. Therefore, innovation capacity building is anchored on this theory. It also supports human resource, knowledge management and organizational capacity in terms of institutionalizing capacity building to achieve the desired objectives.

### **2.2.3. Theory of Action**

Theory of Action has been used in philosophy and sociology differently but the current study focused on the sociological point of view by Parsons (1937). The theory of action suggests that an individual's behavior is influenced by their attitudes, beliefs, and intentions. The theory emphasizes the importance of subjective norms and perceived behavioral control in shaping an individual's intentions and actions.

To incorporate the study of social action and social order with the macro and micro dimensions of variables, Parsons developed action theory. This has an impact on how human resource behave within the company. A group of unstated presumptions about how an organisation can move from its current state to its desired future state make up the theory of action. As stated by Haertel (1999, p. 663) “it connects the dots, stating in plain language which traits are expected to result in the desired outcome”. The theory is critical in establishing capabilities within the organization in delivering a program that generates better outputs, and outcomes.

One weakness of theory of action is that it oversimplifies the complex factors that influence behavior, and may not adequately account for social and cultural factors that shape attitudes and beliefs as critiqued by Vallacher and Wegner, 2014). Critics also argue that the theory places too much emphasis on individual decision-making, and may not adequately consider the role of external factors such as environmental constraints or social norms.

The theory has important implications for capacity building, as it emphasizes the importance of developing positive attitudes and beliefs towards behaviour that is critical for organizational success. Transformational leadership can also be seen as a way to shape attitudes and beliefs, by promoting a vision of the future that aligns with the goals of the organization. Finally, the theory of action has implications for productivity, as it suggests that individuals are more likely to engage in behaviors that they perceive as within their control and aligned with their values and beliefs. The theory of action describes how a corporation can increase its capacity by deciding on the desired actions, such as training, technical

assistance, delivery modes that are approved, or budget support as well as partners to complete a task (Anthony, 2022).

The desired activities support human resource, innovation and knowledge management capacity building that ensures that desired activities empower the employee to achieve the desired task. Hence, the theory is an application in explaining the need for capacity building in an organization that is: human resource, innovation, knowledge management and organizational capacity building. However, it does not support transformational leadership and the productivity of the firm, an area that this study focused on.

#### **2.2.4. Theory of Change**

The theory of change was postulated by Peter Drucker in 1954. This theory is concerned with generating knowledge about whether a program is effective (Chris, 2011). According to Drucker the theory of change suggests that social change requires a deep understanding of the root causes of social problems, and the creation of strategies that address these causes in a sustainable and effective way. The theory emphasizes the importance of collaboration, community involvement, and adaptive learning in creating lasting social change. The theory of change also suggests that social change is a complex and ongoing process that requires ongoing monitoring and evaluation to ensure that strategies are effective and adapted to changing circumstances.

According to Weiss (1995) theory of change suggests that the first step in carrying out any evaluation is to specify the expected outcomes, the actions to be used to achieve those goals, and the contextual factors that might influence how those activities are carried out and their

capacity to do so. Capacity building involves several knowledge generation concepts that require a change in organisational culture, structure and human behaviour for the change to be effected and translated to productivity.

Hence the theory is rooted in explaining the need for knowledge management, innovation, human resource and organizational capacity building through numerous programmes that ensure the change in knowledge, innovation, human resource and organization management.

Capacity building is a process that involves a change in the behaviour of decision-makers and employees. Change of behaviour requires multiple approaches from leadership as well as capacity-building concepts to achieve the desired output (Stewart, 2015). The theory of change affects the application of innovation capacity building in the firm. Complex systems and several change processes are needed to support behaviour change, and these processes work together to create new embedded ways of working. (Greenhalgh et al. 2004). This supports employee capacity building as well as transformational leadership. Therefore, the theory of change was not only applied in capacity building but also in explaining transformational leadership in change management.

James's (2011) critique of the theory of change is that it can be overly complex and difficult to implement in practice. The theory also overlooks the importance of power dynamics and political factors in shaping social change. The theory of change may place too much emphasis on individual actors and may not adequately consider the role of broader societal and structural factors in shaping social problems. The theory has important implications for capacity building, as it emphasizes the importance of collaboration, community involvement, and adaptive learning in creating lasting change (Shao, Feng, & Liu, 2012).



Transformational leadership can also be seen as a way to promote the principles of the theory of change, by creating a shared vision of the future and empowering individuals and communities to participate in creating change.

The theory of change has implications for productivity, as it suggests that sustainable change requires ongoing monitoring and evaluation to ensure that strategies are effective and adapted to changing circumstances, leading to more efficient and effective outcomes. The theory of change supports the need for employee capacity building through the need for behavioural change. Besides, it supports innovation capacity building through the need for institution and organization culture change and innovation. Knowledge management capacity building is about the change in organization learning behaviours through strengthening evaluation, monitoring and learning process.

However, there is weak support for organizational change while transformational leadership acts as the agent of change. Hence application in capacity strengthening and organization changes as well as governance and leadership in the firm which affects productivity of companies.

#### **2.2.5. Dynamic capability theory**

Teece and Pisano propounded the dynamic capability theory in 1994. The mechanisms a corporation uses to adapt to its volatile, dynamic environment are the basis of this theory, which explains how enterprises achieve and maintain competitiveness. The inability of the resource-based and action-based theories to address dynamic economies occasioned the development of the theory, (Lin & Wu, 2014). The dynamic capability theory suggests that

organizations must develop the ability to adapt to changing market conditions in order to achieve sustainable competitive advantage.

The concept of dynamic capability includes organisational learning, knowledge management, innovation, entrepreneurship, and change management (Teece, 2010). This is achieved where the theory puts emphasis on the importance of three core capabilities: sensing, seizing, and transforming. Sensing refers to the ability to identify and respond to changes in the market environment, seizing refers to the ability to capitalize on opportunities created by changes, while transforming refers to the ability to reconfigure organizational resources and capabilities in response to changes. The ability of a firm to adjust to changes in the market through innovation capacity building is crucial for the competitiveness of firms. Dynamic capabilities describe a company's capacity to create novel concepts and goods in response to changing market conditions (Teece, Pisano & Shuen, 1997). By enhancing their organisational, knowledge management, and human resource capacities as well as their ability to innovate, businesses can generate and capture value.

Dynamic capabilities are skills, procedures, organisational structures, and decision-making guidelines. The necessity for transformational leadership to support the change as well as fit the various capacity building with firm capabilities can be supported by dynamic capabilities that may result from change routines and inventive management capabilities. They make it possible for the company to adapt its special assets and competencies to the shifting commercial landscape. For businesses to be profitable in the long run, dynamic capabilities are essential (Teece, 2017). If a company is to survive in ever-changing surroundings and

markets, it must have the ability to arrange its resources, competencies, and other assets profitably (Teece, 2010).

In a dynamic environment of rapid change that is prevalent in a rising number of businesses, talents is essential (Teece, 2017). Building innovation capacity enables businesses to develop new resources, products, processes, and systems utilising their existing resources, and to find innovative ways to use their newly acquired resources to obtain a competitive advantage (Teece & Pisano, 1997). This theory's key components include fostering inventive capability and transformational leadership (Teece, 2010a). Building human resource, innovation, organisational, and knowledge management capacity in relation to other parties like consumers, suppliers, the general public, research institutes, and industry associations improve innovation capabilities.

Possession of dynamic skills also denotes a company's ability to address market issues and create a novel form of competitive advantage (Teece, et al. 2007). Building knowledge management competence can be referred to as the framework's first element of dynamic capability (Teece, 2017). The strategy emphasizes a company's ability to upgrade its skills and integrate and reorganise its resources to match and spur market change through innovation (Teece & Pisano, 1997; Eisenhardt & Martin, 2000).

The study of the importance of a firm's dynamic capabilities which are essential for establishing competitiveness in a dynamic, volatile environment was informed by this notion. For instance manufacturing SMEs work in such circumstances, and their survival and growth is geared towards improving their dynamic capabilities, which include innovation. The dynamic capability method measures a company's capacity to address market issues and

become competitive (Teece et.al, 1997). A more comprehensive framework for understanding how businesses generate value for competitiveness in a dynamic environment is provided by the idea of dynamic capabilities.

Dynamic capability theory is criticized that it may be difficult to implement in practice, and requires significant organizational resources and investment. Critics also argue that the theory may overlook the importance of external factors such as industry structure and competition in shaping organizational success. Gelhard, Von-Delft, & Gudergan, (2016) argue that the theory may not adequately consider the role of power dynamics and political factors in shaping organizational capabilities. Despite these critiques, dynamic capability theory remains highly relevant in contemporary organizations. The theory has important implications for capacity building, as it emphasizes the importance of developing the capability to adapt to changing market conditions and maintain a competitive advantage. Transformational leadership can also be seen as a way to promote the principles of dynamic capability theory, by creating a culture of innovation and learning that enables organizations to sense and respond to changes in the environment. Finally, dynamic capability theory has implications for productivity, as it suggests that organizations that are able to adapt to changing market conditions are more likely to be successful in achieving their goals and creating value for stakeholders.

#### **2.2.6. Transformational leadership theory**

James MacGregor Burns initiated the idea of transformational leadership in 1978. James suggested that leadership may be described as either transformational leadership or transactional leadership, with the two leadership styles being mutually exclusive.

Transactional leaders are different from transformational leaders according to Burns in the sense that transactional leaders use exchange in financial, productivity, political, and psychological influence to attract their followers. On the contrary, transformational leaders are followed by their followers regardless of whether the exchange mechanism is there or not.

Burns argued that transformational leaders achieve the loyalty of their followers by targeting their value system and focussing on the need to achieve a higher purpose. Hence, a transformational leaders assist their followers to achieve the set value or purpose beyond the expectation of sharing vision, mission and goals (Bass & Riggio, 2006). Burns's introduction has resulted in different scholarly interpretations and the development of transformation leadership. Numerous theorists build on Burns's concept of Transformational leadership including Tichy & Devanna (1986), Sashkin (1988), Bennis and Nanus (1985) and Bass (1985).

The contribution of Bass' theory of transformation and transaction leadership is the most prominent among other supporters of transformational leadership (Yukl, 2010). Bass asserts that the two types leadership are not opposite sides but a continuum with few degrees of differences. According to Bass (1985), transformational leaders exhibit four different sorts of behavioural patterns that empower followers to go beyond their interests and go above and beyond. These include idealised leadership, motivational inspiration, intellectual stimulation, and individual thought. When a leader sets a good example for his or her followers and earns their respect, that influence is idealised.

A compelling future vision and high expectations for followers to surpass their expectations to accomplish that vision are both components of inspirational motivation. Encouragement to examine presumptions, reframe difficulties, take chances, discover new methods of operation, and be innovative are all examples of intellectual stimulation. Wright, Moynihan and Pandey (2012) argue that the weakness of transformational leadership theory is that it may be too focused on the individual leader and may overlook the importance of broader organizational and societal factors in shaping leadership effectiveness.

The theory may overemphasize the importance of charisma and personality traits in leadership, and may not adequately consider the role of situational and contextual factors in shaping leadership effectiveness. Despite these critiques, transformational leadership theory remains highly relevant in contemporary organizations. The theory has important implications for capacity building, as it emphasizes the importance of empowering individuals to achieve their full potential and create positive change. Transformational leadership can also be seen as a way to promote the principles of other theories, such as the theory of action and dynamic capability theory, by creating a culture of innovation, collaboration, and adaptive learning.

Finally, transformational leadership has implications for productivity, as it suggests that leaders who are able to inspire and motivate their followers are more likely to achieve higher levels of performance and create value for stakeholders. Finally, the attentive leader takes the time to coach and pay attention to the needs and growth of each follower. Transformational leadership theory supports the need to have a transformational leader in a matter that deals with the implementation of capacity building to improve the profitability of the firm.

## **2.3 Review of Related Literature**

A review of the related empirical literature is summarized in this section in form of capacity building, transformational leadership and productivity of sugar firms in Kenya.

### **2.3.1 Capacity Building**

Workforce, career, and organisational development are three crucial components of Human Resource Development (HRD) (Shahi, Farrokhsheer, Taghipourian, & Aghajani, 2020). Because a firm's performance has a favourable impact on workforce capabilities, human resource development aids in this process. Encouragement of employee involvement in decision-making, according to Mouallem and Analoui (2014), strengthens human resource development and fosters positive relations between management and the workforce. Human resource development in an organisational setting entails carrying out human resource activities to improve workforce capabilities for the present and future goals to get the greatest performance out of the workforce (Akoi & Yesiltas, 2020).

Employee capacity building remains crucial in developing employees' skills (Gekonde, Nyamboga & Nyarohoo, 2014). Okoh & Onoriode (2019) adds that employee capacity building enables firms to improve the competencies, skills and knowledge of employees through training programs set by the firm. Employee capacity building is a process of improving skills, capability and knowledge of human resource (Gekonde, Nyamboga & Nyarohoo, 2014) it plays an important role in motivating, training and team building in a firm. Employee capacity building enables the human resource to improve in terms of knowledge, skills and competencies (Okoh & Onoriode, 2019). Employee development is

important in improving knowledge, motivation, reward management, performance appraisal as well as recruitment and selection.

Obor (2017) and Sholesi (2021) reveal that training is an important human resource development component that enables an employee to gain the capacity to acquire skills and knowledge leading to improvement in productivity. The role of employee capacity building is to empower employees to be more productive. Safkaur and Sagrim (2019) argue that the education and training of human resource positively influence the financial performance of a firm.

In a study based in Indonesia, Safkaur and Sagrim (2019) point out that education and training assist firms to develop employee capacity building which positively affects financial performance. Therefore, human capital in an organization contains different competencies and skills that firms can adopt to solve problems and rely on their intellectual capabilities to increase productivity. Training and development practices are significant in enhancing the performance of the firm as posited by Sholesi (2021). The study also suggests that training methods and techniques should be considered to enhance the performance of the firms in Nigeria. From Kenya, Obor (2017) also found that human resource development has a positive significant relationship with the performance of the public sector.

Knowledge management is crucial in developing a collaborative innovation community capacity building (An, Deng, Chao and Bai, 2014). The study indicates that knowledge management and capacity building are obtained through creating synergy in communication, collaborative integration of knowledge, and artefacts and integrating connectivity in knowledge management activities. In a study based in Malaysia, Alaarj and Mohamed (2017)



aver that knowledge management capacity building remains an important aspect of the performance of the firm as it ensures that knowledge management resources are availed to the firm.

Knowledge is required to ensure the sustainability of skills and competence through knowledge management capacity building. This can be achieved through knowledge sharing, knowledge creation and knowledge acquisition. Alaarj and Mohamed (2017) point out that knowledge management resources should be managed to ensure high performance of firms. This requires firms to integrate knowledge management activities according to An, Deng, Chao and Bai (2014) through trust-building collaboration, communication and integration of building connectivity among employees.

Innovation capacity building is a crucial enabler for firms to use modern technology as a competitive advantage. Chadee & Roxas (2013) asserts that the use of innovation capacity has enabled large Russian firms to have a competitive advantage. However, the study also reveals that corruption, rule of law and regulation of quality affect innovation adoption among firms. From point of view of Sözbilir (2018) innovation capacity building which was examined based on education level was found to affect innovation performance in firms. An organization that has improved internal and external learning capacity building stands a high chance of improving innovation capacity building according to Forés and Camisón (2010) which results in the enhancement of business performance.

Brix (2018) posits that innovation capacity building is linked with organization learning in the context of the exploitation and exploration approach. Innovation capacity building has a significant role in creating a competitive advantage. However, there is the challenge of

corruption and lack of appropriate legislation in most countries according to Chadee & Roxas (2013). Sözbilir (2018) asserts that firms which have invested in innovation capacity building have better innovation performance. Internal and external learning capacity catalyzes innovation capacity building resulting in higher business performance (Forés & Camisón, 2010, Brix, 2018).

Organizational capacity building is an important aspect that assists the firm to strengthen the organizational structure, system and strategies to ensure that a firm achieves its objectives. In Indonesia, Widodo (2022) asserts that organizational capacity building requires a visionary leader to achieve the organizational goals. However, in order to achieve efficiency, effectiveness and productiveness in the organization, visionary leadership must have all the competency in terms of interpersonal, intrapersonal and business skills to change complexity and uncertainty in opportunity.

Organizational capacity building is crucial in ensuring that the organization has strengthened its system, structure and strategies. In the era of Covid-19 pandemic and technological disruption, Widodo (2022) asserts that organizational capacity building must be embraced with a transformative leader in place to steward the organizational goals productively, efficiently and effectively. Organizational capacity building is not only a leadership issue as asserted by Rommerskirch-Manietta et al. (2021) but also affects the working environment and staff capacity. This is because the organizational policies, strategies, structures and systems determine the efficiency, effectiveness and productivity of employees. In a study by Khaldoun, Nadeen and Long (2019), organizational strategic capacities were associated with

the multiple-domain organization. Hudib & Cousins (2022) aver that organization evaluation capacity building is associated with the evaluation policies adopted in the firm.

Rommerskirch-Manietta et al. (2021) state that organizational capacity building is dependent on the modification of the environment, staff capacity and multifactorial intervention. This study was a systematic review of nursing facilities where the organizational capacity building was used to promote resident mobility in Germany. Therefore, the organizational capacity building plays a crucial role in improving the working environment and enhancing the capacity of workers.

In a study conducted in Lebanon, Khaldoun, Nadeen and Long (2019) assert that organizational capacity is associated with the scope of the firm. A single-domain organization is significantly associated with human resource and external relations capacities while a multi-domain organization is significantly associated with strategic and financial capacities. The use of organizational capacity building is determined by the organization policies used (Hudib & Cousins, 2022).

The organization policies developed in the organization by top management is strategies, goals and tactics which are a driving force for any capacity-building activities. Organizational capacity building has a moderating effect between dynamic capabilities in the organization and organization performance as asserted by Widiyanto, Lestari, Adna, Sukoco and Nasih (2021). Organizational capacity building assists in improving dynamic capabilities and resources that are within the firms. Organizations must increase competitiveness and coordination to survive in these dynamic global markets. This necessitates the formation of specific strategic alliances, to create a striking balance in the economy today (Teece, 2017).

It is highlighted that dynamic capabilities are the equipment needed to rearrange resources, improve technology resources, develop learning techniques, make organisations design flexible and organised, and also create a trusting culture (Eisenhardt and Martin, 2000; Teece and Pisano, 1994).

Alves, Barbieux, Reichert, Tello-Gamarra, and Zawislak (2017) link management, operational, and transaction capabilities to innovation and its performance. However, the study overlooked the significance of moderating element of transformational leadership on capacity building and productivity of sugar companies in Kenya, which is one of the main components of the current study.

### **2.3.2 Transformational leadership**

Successful leaders influence their employees by motivating them to improve the performance of the organization (Alseiari, Sidek & Al-Shami, 2019). Organizations have realized that the success and effectiveness of their activities depends on the potential of their leader. According to Andjarwati, Susilo, and Audah (2019), organizations have two major fundamental premises that they use to operate; to make profits and to provide social services without generating any income.

Safkaur and Sagrim (2019), make a distinction between a leader and a manager with a postulation that modern management mainly deals with organizing, staffing, planning, coordinating, and controlling. A leader has to communicate with his followers (employees), seek support and cooperation, and inspire and motivate employees to generate a strong commitment to the established objectives and goals of the organization. Ngaari (2019)

considers leaders as key decision-makers who make decisions on acquisition, allocation of resources, conversion of resources into products, and delivery of value to the citizens and other stakeholders.

The essence of assessing transformational leadership in the organization is the fact that they recognize and connect their values and needs to those of their employees (Jing, 2017). The specific transformational leadership adopted by a manager depends on several factors such as the personality of the subordinates and the leader (Edelman & Knippengberg, 2018). The environment and behaviour of the organization are achieved through a transformative leader who works with employees towards achieving the overall objectives and goals of the organization (Lentner, Nagy, Vasa and Hegedűs, 2019). According to Karácsony (2019), organizations focus on the merits of different transformational leadership styles and their effectiveness when seeking an efficient way to achieve their goals. Ngaari (2019) states that effective leadership helps employees define their goals and discover ways of achieving them.

Transformative leaders have inspiration traits according to Razzaq, Sami, Manum, & Hammad (2020), who assert that such leaders can share their vision with their followers. The shared vision between the leader and employee enables them to be committed, satisfied and motivated to work extra hard to achieve the vision, mission and purpose set by transformational leadership. The inspiration asserted by the transformation of leader to subordinate enable them to go beyond self-interest for the good of teamwork. Therefore, transformational leadership plays a direct and indirect role in enhancing organizational performance by ensuring that employee is committed, satisfied and motivated.

Transformational leadership has been linked to the creativity of employees by Nyacanchu, Joel, and Bonuke (2017), since it plays an important role in transforming dynamic capabilities into a firm's performance. Creativity is associated with the innovative capabilities of the firm which is essential for the improvement of performance.

Therefore, transformational leadership moderates the existing dynamic capabilities into productivity. Azegele, Okeyo, and Nyambegera (2021) assert that transformational leadership assists an organization in motivating employee which assists in improving governance leading to high performance. Firms which adopt transformative leadership have changed governance resulting in motivated employee and high employee performance.

### **2.3.3 Productivity of an Organization**

Capacity building represents a considerable change in the field of human resource management. It focuses on human resource management system functions that play a vital role in developing human capital at the individual, institutional and societal levels. This is intended to enhance skills and knowledge to achieve a suitable and measurable outcomes (Munyao, 2019). Organizations have realized the importance of successful human resource practices and policies because this improves their performance in areas like quality in production, fiscal, and productivity performance (Olayo, 2018). Irrespective of organizations having different types of stakeholders, their main goal is to have an unmatched performance with superiority which to some extent relies on the effectiveness of efficient performance.

Organizational performance is a functional process that involves; managerial support, human resource development, institutional development, and capacity in terms of organizational resources. Onyango, Wanjere, Egessa & Masinde (2015), used organizational performance in measuring productivity in sugar firms in relation to organizational capabilities. For successful performance, an organization should boost its internal processes and minimize over-reliance on outside experts as sources of knowledge, solutions, and resources to issues affecting its stakeholders.

Capacity-building practices such as institutional development, human resource development, organizational development, and effective strategic management could enhance employee competence, leading to higher performance (Kimeo, & Achuora, 2021). Measuring organizational productivity is a difficult task, especially for organizations which have many objectives relating to satisfaction and retention of customers, profitability, adaptation to the dynamic environment, productivity, employee satisfaction and social responsibility. A firm's productivity has for a long time been conceptualized based on financial measures while assuming the non-financial perspective. However, some scholars have recommended a more comprehensive construct of performance that incorporates the non-financial aspect such as efficiency, effectiveness, company image, and quantity of production (Waiganjo, Mukulu & Kahiri, 2020).

According to Kipruto and Minja (2020), organizational productivity refers to the achievement of objectives and goals of the organization efficiently and effectively. The idea has been supported by Apunda and Ndede (2020), who used several indicators to measure organizational productivity.

This included efficiency, and this indicated the degree to which the organization can move to the next level to achieve its mission and goals. Effectiveness is the capability of the organization to offer quality products and efficient service delivery to the customers within the organization's structure, relevance and financial ability or viability for survival to have more financial resources which would be above their expenditure.

The quality of products is normally adopted as an important measure of the productivity of the organization. Nwankwo, Olabisi, and Onwuchekwa (2017) used the quality-of-service delivery in measuring the SACCOs' performance in relation to capacity-building strategies in Nigeria. The measure relates to quality which is normally a comparative base on set standards or other similar products. This important aspect affects customer satisfaction which leads to repeat buying of a product based on quality. Similarly, in the service industry, Chukwurah, Uzor, Iwuno, & Chukwueloka (2020) measure the productivity of employees using quality of service delivery in relation to capacity building. The measure is appropriate for measuring the quality of products.

Efficiency is normally used to measure the timeliness of employees as well as the ability of tasks to be done within budget in an organization as stated by Nwankwo, Olabisi, and Onwuchekwa (2017). This was also used by Otibine (2016) in relation to capacity-building development strategies. It is an important measure and it uses time and financial resources to measure productivity. Employee performance is another common measure of productivity. Ajetomobi (2021) argues that capacity building affects employee performance in terms of productivity level, efficiency, effectiveness and commitment. The aspect of employee performance is seen in the cumulative impact on the productivity of the organization.



Quantity is a measure that is common with products where manufacturing firms set targets to achieve both the specific and overall goals of the organization. Waiganjo, Mukulu & Kairi (2020) used quantity to measure productivity in product-related firms. The productivity of an organization in the current study adopted the quantity of sugar produced, quality of sugar produced, the effectiveness of production and employee performance.

#### **2.3.4 Employee capacity building and Productivity of an Organization**

A study by Safkaur and Sagrim (2019) seeking to determine the effect of human resource capacity on organizational financial performance in Indonesia established a significant influence on organizational performance. The study adopted a descriptive research design where a target population of 100 companies was used. Stratified random sampling was used to obtain a sample of 78 companies. Both descriptive and inferential statistics were used to analyze data. The findings indicated that individual capabilities such as education and training of the users of Human Resource Development(HRD) had positive effects on the company's financial performance. The current study used a correlation research design as opposed to a descriptive research design which enhanced the relationship between variables.

Sholesi (2021) carried out a study to assess the impact of HRD on food industry performance in Ota Ogun, Nigeria. The descriptive research design was used and a systematic sampling method was employed to obtain 248 respondents. Research questionnaires were used to collect data from the participants. Obtained data were analyzed using regression with the help of SPSS 23.0. The findings indicated that industries' performance was determined by employee training and development practices, suggesting that effective training methods and

techniques in an organization can improve firm performance. The current study targeted management in sugar firms.

Obor (2017) conducted a study seeking to determine the impact of human resource development on public sector performance. The study was conducted in Kenya's Ministry of Sports, Culture, and Arts. Descriptive research design was employed where questionnaires were used to obtain primary data from 50 respondents and HRD literature; documents from the ministry were used to generate secondary data. Descriptive statistical analysis was used to analyze data which was presented in the form of frequency tables. The findings indicated that human resource development positively and significantly influenced the performance of the public sector. The current study targeted 218 employees in sampled private and public sugar firms as well as utilized a correlation research design.

Gekonde, Nyamboga and Nyarohoo (2014) examine strategic human resource and organizational capacity building in relation to the performance of public service delivery. Employees were examined using baseline results from the period of 2012 to 2013 on improvement in the performance of service delivery in Nakuru County. Roseau's psychological contract theory guided the study. A descriptive research design was adopted with a target population of 308 employees from 9 sub-counties and a sample of 154 respondents from 5 sub-counties was used. Secondary and primary data were used. The primary data was collected using questionnaires which were analyzed using descriptive and inferential statistics respectively. The study found that human strategies had no significant relationship with public service delivery. The current study examined employee capacity building in relationship with employee productivity.

Okoh & Onoriode (2019) investigate the need for capacity building in human resource management among financial firms in Nigeria. The study targeted 80 top managers and sampled 43 respondents from six commercial banks in Nigeria. Questionnaires were used to collect information from the managers. The results indicated that capacity building enables proficiency among the top management as well as improved skills and competencies among management staff in the financial institution. The study recommended that there is need to improve on engagement of stakeholders and training needs assessment during the capacity building process to ensure effective capacity building in a financial organizations in Nigeria. The current study was done in sugar firms in Kenya.

Mouallen & Analoui (2014) examined the need for capacity building in human resource management-related issues in Lebanon, due to the rise of human resource investment to enable an increase in the performance of employees. The study used a case study of international consultancy organizations specialized in environment, planning, engineering, architecture and economics in Lebanon, Middle East. Interview schedule and observation were used to collect primary data while secondary data were collected from the Beirut design office of the organization. The results revealed that the organization required organizational and employee capacity building to enhance selection, retention, motivation, employee involvement, reward management and performance appraisal.

The management required training and development to increase managerial effectiveness for enhanced capacity-building purposes. Finally, the study advocated for transformational leadership to enable new changes and strategies necessary for corporate success and sustainability. The current study examined capacity building, transformational leadership and

productivity as means of examining similar issues affecting sugar companies in Kenya. Data was collected using questionnaires.

### **2.3.5 Knowledge Management Capacity Building and Productivity of Organization**

Alaarj and Mohamed (2017) conducted a study that examines the impact of knowledge management capacity on the performance of the service sector in Malaysia. The study used a mixed research design. Purposive sampling technique was adopted by 153 respondents being selected from senior executive top-level management of the public listed service-providing companies in Malaysia. Partial Least Square was further employed to analyze data. The findings indicated a significant relationship between knowledge management resources and performance. The study recommended that an organization's management needs to link knowledge management capacity with the key performance indicators. The current study adopted an ordinary least square methodology that provided multiple regression models for examining the relationship between variables.

Deng, Chao and Bai (2014) assessed the knowledge management approach to support collaborative innovation community capability building. Collaborative innovation is the multi-disciplinary perspective of community and knowledge management capacity building. The study conducted a desk review of the literature associated with collaborative knowledge management and innovation. The results revealed that knowledge management had a role in supporting collaborative innovation community capacity building through converging knowledge management, using knowledge activities for synergy in communication and knowledge artefacts reconfiguration for integration of knowledge management activities.

The convergence of knowledge management enables trust-building collaboration, communication and integration of building connectivity. The current study examined knowledge management capacity building as opposed to the use of knowledge management in developing collaborative innovation community capacity building.

Patwary, et al. (2023) examined knowledge management practices, organization commitment and capacity building on employee performance in Malaysian hotel industry. This study aims to investigate the impact of organisational commitment, capacity building, and knowledge management practises on employee performance in the hospitality sector. This study also looked into how organisational commitment and capacity building affected the relationship between knowledge management practises and worker performance. Data from Malaysian hotel employees was gathered using a quantitative strategy and a questionnaire survey. The study used 291 participants completed self-administered questionnaires to gather data, and partial least squares structural equation modelling was used to examine the hypotheses. The findings of this study demonstrate that knowledge-employee performance is favourably and significantly influenced by knowledge management practises. Employees attain this performance thanks to the organisational commitment and capacity-building culture's mediating influence. The current study focused on productivity in Kenya Sugar industry in relation to knowledge management capacity building.

Harper and Dickson (2019) investigated capacity building for knowledge management mobilisation in health and social care by using evaluation principles. The impact was evaluated using surveys, focused groups discussions, and structured interviews.

Results showed that Evidence for Change benefited people, teams, organisations, and local communities by helping them change and learn from evidence-informed practises. According to the report's findings, Evidence for Change's incorporation of developmental evaluation principles was crucial in creating a creative capacity-building framework for successful knowledge mobilisation in the health and social care sectors. The current study focused on the relationship between knowledge management capacity building and productivity where innovation capacity building is an independent variable just as knowledge management capacity building.

In Indian organisations, the effects of knowledge management competencies on knowledge management effectiveness were studied by Bharadwaj, Chauhan, and Raman (2015). The purpose of this research paper was to examine knowledge management capabilities and their effects on knowledge effectiveness in major Indian organisations. The capacities of knowledge management were examined in relation to infrastructure, structure, and culture. The four main steps of knowledge management are creation, acquisition, storage, and application.

Structural equation modelling was used to analyse data gathered from 156 organisations. The findings showed that knowledge management effectiveness may be increased by utilising both process and infrastructure capabilities. The current study focused on the relationship between knowledge management capacity building and organization productivity in the sugar industry in Kenya.

### **2.3.6 Innovation Capacity Building and Productivity of an Organization**

Brix (2018) assessed innovation capacity building in relation to organizational learning. The study aimed at exploring innovation capacity building through the balance between exploitation and exploration in organizational learning. The study used conceptualized literature from theoretical perspectives and an innovation capacity-building framework. The findings revealed that innovation capacity building had positive and negative impact on the local organizational context for ambidexterity, and the interactions required such as feedback between the management team and the employees so they together can build an ambidextrous working culture. The current study examined innovation capacity building in relation to productivity.

Chadee & Roxas (2013) examine the institutional environment, innovation capacity and performance of firms in Russia. After the collapse of the Soviet Union, most organizations in Russia had to undertake market reforms for competitive advantage. The study sought to establish the competitiveness of Russian firms in relation to corruption, rule of law and regulation, and quality effect on innovation capacity and performance. A survey of 787 large-scale firms in Russia was undertaken. The findings indicated that corruption, rule of law and regulatory quality had a strong negative influence on both innovation capacity and firms' performance. It also found that innovation capacity strongly mediated the effects of institutions on the performance of the firms. The study was done in the largest Russian firms while the current study focused on sugar companies in Kenya.

Sözbilir (2018) conducted a study that examines innovation capacity and innovation performance. The study aimed at investigating the education or training level of managers in

relation to innovation capacity and performance of innovation in the firms. A sample of 456 managers from 274 firms selected from 500 top companies in Turkey. The study used regression, ANOVA, correlation and confirmatory factor analysis in testing the hypothesis. The findings revealed that significant difference between managers with master's degrees and other managers with other education levels in terms of innovation performance. Therefore, innovation capacity has a positive significant effect on innovation performance. The current study focused on innovation capacity in relation to productivity rather than innovation performance.

The moderating effect of internal learning capacity and absorptive capacity on performance was examined by Forés & Camisón (2010). The study also examined the mediating role of innovation capacity in the organization. Due to dynamics in the business environment firms have a high demand for innovation. Firms have been forced to invest in both external and internal learning capacities to improve the existing knowledge and capabilities of employees resulting in high innovation. The study aimed at examining the joint effect of the internal and absorptive learning capacity of knowledge generation on innovation capacity. The study targeted 952 industrial firms in Spain and adopt a Structural Model model. Findings revealed that absorptive capacity and internal learning capacity had a joint effect on innovation capacity in the firm. Innovation capacity had a moderating effect on the influence of learning capacities on the performance of the firm. The current study examined innovation capacity building as part of capacity building components while transformational leadership was moderating variable in relation to productivity.



Mwawasi (2014) examined the relationship between technology leadership and ICT use as well as the strategies of capacity building in ICT integration in Kenya. Technology leadership is increasingly adopted in school leadership. This is a pedagogical change where ICT is integrated into the learning and teaching process. The use of innovation assists learners in developing countries in Africa to improve access to information and education through innovative ICT platforms.

Building innovational capacities among teachers enables teachers to effectively integrate ICT in their teaching and learning process in public secondary schools in Kenya. The study used a case study qualitative approach on five school leaders who participated in the capacity building. The school leaders were interviewed, teachers were observed in classroom practices and four teachers were engaged in a group focus discussion. The results indicated that school leadership improves innovation through the provision of capacity building to teachers using ICT facilities for training and exploring more avenues for integration of ICT in the learning and teaching process. The current study was done in the context of sugar manufacturing firms in Kenya.

### **2.3.7 Organizational Capacity Building and Productivity of Organization**

In Indonesia, organizational capacity development was examined by Widodo (2022) in relation to visionary leadership in education and training. In this era of Post-Covid 19 recovery and industrial technology revolution, there is a necessity to examine the need for a visionary leader both in education and training. A qualitative, descriptive approach was adopted where the human resource development centre of manpower was examined in

Jakarta, Indonesia. Training staff, sub-coordinators, coordinators and structural officials were interviewed besides observation conducted on the institution.

The study findings indicated that visionary leaders had an important role in organizational capacity building in an era of complexity and uncertainties in the industry. There are several competency domains of a leader that is: intrapersonal, interpersonal, leadership and business domains. In the findings, the competency domain was responsible for organizational capacity development assisting the organization to achieve its goals during the pandemic and industrial disruption 4.0. A visionary leader was found to assist in organizational capacity development considering the complexities and volatile macro-economic business environment. The current study's main focus is organizational capacity building and organizational productivity where transformational leadership was examined to ascertain if it moderated this relationship.

Hindasah and Nuryakin (2020) assess the contribution of organizational capacity to SMEs' financial performance in Korea. The study adopted an exploratory research design where purposive sampling technique was used to obtain 150 respondents. Self-administered questionnaires were used to obtain primary data, and SMEs records were used to obtain secondary data for analysis. The study used confirmatory factor analysis for data analysis. The results indicated that organizational capabilities positively influenced the SME's financial performance. The study recommends that SMEs invest in organizational capabilities to increase their financial performance. The current study's main focus was on the productivity of sugar firms in Kenya rather than the performance of SME firms.

A systematic review by Rommerskirch-Manietta et al. (2021) investigates the organizational capacity building in nursing facilities to promote resident mobility. Nursing facilities, staff and residents participated in the study where a systematic review was done as per the Cochrane collaboration approach.

The results indicated that there were 14 organizational capacity-building interventions which were categorized into three: that is multifactorial, nursing staff capacity and environment modification interventions. However, there was a highly heterogenous and inconsistent effect of organizational capacity building on growing nursing staff capacity and resident mobility. It emerged that there was a need to expound the understanding of organizational capacity building and the development of more interventions that promote resident mobility. The current study focused on the sugar industry in Kenya using primary data collected using questionnaires.

Khaldoun, Nadeen and Long (2019) examined the association between organizational capacity and scope among Lebanese nonprofit firms. The purpose of the study was to examine the impact of organizational capacity as well as scope on nonprofit firms in Lebanon. Nonprofitable organization databases in Lebanon were analyzed. The results showed that human resource and external relationship capacities are significantly related to a single-domain organization. In multiple-domain organizations, it was found to be significantly related to strategic planning and financial capacities. Hence, the scope of the organization whether single or multiple domains differently affected nonprofit firms in Lebanon. The current study used organizational strategic, structural and systems in measuring organizational capacity building.

Dynamic managerial capabilities, organizational capacity for change and organizational performance were investigated by Widiyanto, Lestari, Adna, Sukoco and Nasih (2021). The study also examined the moderating effect of attitude towards change in a public service organization. A large Indonesian public government institution where a target of 313 managers was adopted. The test of the hypothesis was achieved through the use of Structural Model modelling.

Findings revealed that dynamic capability among middle management had a significant role in enhancing the performance of the organization. Organizational capacity building had a mediating role in the relationship between dynamic managerial capabilities and organisational performance. In the current study organizational capacity building was an indicator of capacity building and was mediated by transformational leadership.

A study by Hudib & Cousins (2022) examines evaluation policy and organizational evaluation capacity building. The evaluation policy in international aid agencies is formulated and implemented to guide evaluation practices. The study aims at examining the interactiveness between evaluation capacity building and evaluation. Exploratory descriptive design that examined 52 evaluation policies from multilateral and bilateral aid agencies was adopted. Findings revealed that evaluation use, evaluation purposes and organization leadership defined evaluation policies. The evaluation policy had an association with evaluation capacity building used which was determined by evaluation literacy, organization decision making and learning benefits. The current study focused on organizational capacity building on the productivity of sugar companies.

### **2.3.8 Transformational leadership and Productivity of Organization**

A systematic review by Razzaq, Sami, Manum, & Hammad (2020) examines transformational leadership in relationship with organization performance. A systematic review of 15 articles with Western and non-Western contexts was used to examine the relationship between transformational leadership practice on the performance of an organization. It aimed at evaluating the role of a transformational leader in guiding followers and improving organizational productivity.

Transformational leadership is concerned with developing environmental diversity resulting in different interests and capabilities that are suitable for the business environment. Organization performance was measured through commitment, satisfaction and motivation which was associated with transformational leadership. Transformational leadership was also associated with the ability of a leader to have a shared vision for the future, increase the awareness of employees, and acceptance of shared purpose and mission from the study, a leader should inspire the subordinates to acceptance of a shared mission and purpose and inspire followers to go beyond self-interest for the good terms of team work. Transformational leadership style is significant for organizational performance with indirect and direct associations with employee performance.

Transformational leadership is updated and positively improves the competence of employees. The reviewed literature indicates that transformational leadership has a positive significance on the performance of the organization as well as employee performance. The current study examined the moderating effect of transformational leadership on productivity in the context of a sugar companies in Kenya.

Vasilaki, Tarba, Ahammad, and Glaister (2016) conducted a study to determine how transformational leadership moderated human resource development in organizational mergers and acquisitions in England. The study reveals that training and development had a positive influence on employees' behaviour in a news organization. However, training and development and organizational mergers and acquisition are positively and significantly moderated by transformational leadership style. The current study moderated transformational leadership on the relationship between capacity building and organizational productivity.

Alseiari, Sidek, and Al-Shami (2019) carried out a study on the role of transformational leadership style as a moderator between human resource capital and government innovation in Abu Dhabi. The study utilized a survey and quantitative method in collecting primary data from the respondents. The obtained data were analyzed descriptively and inferentially. The findings reveal that human resource capital and organizational innovations in the government of Abu Dhabi are positively and significantly moderated by transformational leadership style. Therefore, the study recommends that the transformational leadership style enhances innovation in the workplace, which leads to a competitive advantage for the organization.

Lai, Tang, Lu, & Lee (2020) assessed transformational leadership with respect to the performance of work. The mediating role of work engagement was also assessed on transformational leadership and performance of work. Transformational leadership has traits that influence followers for organizationally beneficial results in improved task performance through the ignition of followers' work engagement. Transformational leaders inspire employees to engage in work resulting in better work performance.

The study utilized a multisource and multitemporal research design to reduce the deliberation of common method variance. A sample of 507 nurses working in 44 teams was used. Hierarchical linear regression analysis was used where leader-member exchange, role-based self-efficacy, and transactional leadership were controlled. The study found that work engagement still mediates the positive relationship between transformational leadership, work performance, and helping behaviour. The current study examined transformative leadership as moderating variable using the moderated regression model.

A study by Mohammed and Zakari (2021) sought to assess the moderating role of transformational leadership style on the relationship between entrepreneurial education and SME performance in Ghana. The study used a quantitative research design, whereby sample size of 300 respondents was obtained by employing a convenience sampling technique. Self-administered questionnaires were adopted to obtain primary data from the sampled respondents. Descriptive statistics were used to analyze data. The study used partial least square and confirmatory factor analysis and inferential statistics. The results showed that the transformational leadership style had an insignificant moderation effect on entrepreneurial education and SMEs performance. The current study adopted transformational leadership as a moderator between capacity building and the productivity of the firm.

Nyacanchu, Joel, and Bonuke (2017) explore the relationship between dynamic capability, transformational leadership style and manufacturing firms' performance in Nairobi County. Adopting a transformational leadership style as a moderating factor is crucial since transformational leaders improve creativity in human resource. The study used an

exploratory research design where the target population comprised 1496 firms. A sample size of 369 managers was obtained through stratified and simple random sampling techniques.

Primary data was collected by employing a structured questionnaire research instrument. From the regression analysis, it was found that dynamic capability and firm performance were significantly moderated by transformational leadership. The study found that transformational leadership is responsible for creativity and innovation in firms. The current study examined transformational leadership as moderating variable between organizational capacity and firm productivity.

Azegele, Okeyo, and Nyambegera (2021) carried out a study to determine the moderating role of transformational leadership style on the relationship between governance and insurance companies' performance in Kenya. The study employed a cross-sectional research design with a target population of 52 companies. The study used both census and simple random sampling techniques to obtain a sample size of 208. There were 104 respondents comprised of human resource managers and chief executive officers who were picked through the census method, while a simple random sampling technique was employed to select 102 respondents who were picked from general employees.

A research questionnaire was used to collect primary data. The results revealed that through the motivation of employees by transformational leadership, firms' governance is enhanced resulting in high performance of the firm. It was revealed that the transformational leadership style had a significant moderating impact on the relationship between governance and insurance companies' performance in Kenya. The study concludes that there is a need for companies to embrace transformation leadership styles in their organizations. The current



study moderated transformational leadership on the relationship between capacity building and productivity.

### **2.3.9 Capacity Building and Productivity of Organization**

Institutional development is a strategy that seeks to enhance how firms relate to their microenvironment to attain high organizational productivity. This practice involves the structuring of an organization with the aim of better alignment with the corporate strategic goals and objectives. To achieve organizational goals and objectives, the organization needs to develop and impart knowledge, skills, and competencies to the workforce (Carnevale, 2018).

Therefore, productivity is a common measure of performance in the product-based industry which aims at checking the quality and quantity of the products as well as employee performance and timeliness in production.

Wassem, Baig, Abrar, Hashim, Zia-Ur-Rehman, Awan, and Nawab (2019) conducted a study on the impact of capacity building on textile industry productivity in Pakistan. The study used a quantitative approach, and 200 respondents were sampled using the conventional technique. Descriptive data analysis was employed to analyze the data obtained. The findings indicated institutional development had an insignificant relationship with industry productivity. The study recommended that the management of institutions needs to support capacity-building ability to enhance its effect on organizational performance.

Nwankwo, Olabisi, and Onwuchekwa (2017) conducted a study in Nigeria that sought to determine the influence of capacity-building strategies on Saccos' productivity in Osun. The

study used a descriptive research design where 529 respondents were selected purposively. The use of structured questionnaires was used to obtain primary data, which was analyzed using descriptive and inferential statistics.

The results indicated that institutional development had a positive effect on Saccos' productivity among the capacity-building strategies. The study measured the performance of the Saccos in terms of efficient, effective and quality of service delivery. The current study focused on the quantity and quality of the sugar products since the study is about the production of sugar in Kenya.

A study conducted in Nigeria by Chukwurah, Uzor, Iwuno, & Chukwueloka (2020) examined the relationship between capacity building and employee productivity in Anambra State Civil Service Commission Awka. The study used a survey design with a population of 280 respondents. Chi-square was used to test the relationship between capacity building and employee productivity. Employee productivity was measured through the quality of service delivery. The study indicated that capacity building had a positive influence on the quality of service delivery, however, there were challenges of the inadequacy of modern technology, insufficient funds and lack of training. The current study measured productivity in terms of the quality of production rather than the quality of service delivery.

In Nigeria, capacity building was examined by Ajetomobi (2021) in relation to employees' performance in Akoko South West Local Government (ASWLG). The study aimed at investigating capacity building and employees' commitment. Productivity level, effectiveness and efficiency were used to measure the performance of employees. A Survey research design was adopted where questionnaires were administered to a sample of 158

employees – a simple random sample. Simple linear regression was used as inferential statistics. R square was used to test the hypothesis in which 94% of the variation in employee performance was attributed to capacity building.

The result indicated that there was a significant relationship between capacity building and employee performance. R Square results revealed that 93% of employees' productivity was attributed to capacity building. Therefore, capacity building had a positive significant influence on employees' productivity. It was also found that R square of 0.8 indicated that a variation of 80% in employee commitment had been significantly contributed to by capacity building. Therefore, the study concluded that capacity building had a positive significant influence on employee productivity, employee performance and employee commitment. The current study adopted the concept of employee productivity.

In South Africa, Green (2016) examined employee perceived factors influencing the organization's productivity. The study evaluated factors that affected the productivity of an organization as perceived by the employee. The study utilized a quantitative paradigm that used a non-probability sampling method. A sample of 161 employees was given a structured questionnaire in two offices in KwaZulu-Natal, South Africa. Correlation analysis was utilized. The findings revealed the relationship between organizational policies and employee benefits. It was also found that performance appraisal and employee benefits were correlated. Similarly, organizational policies were correlated with performance appraisal. This research also confirms the findings of others, more significantly, in terms of reinforcing the perceptions of leadership and work-life balance as influential factors. The study concludes that organizational policies, employee benefits, performance appraisal, workplace

interactions, effective leadership and work-life balance affect employee performance. Employee performance was found to significantly lead to organization productivity.

Ahmad, Farrukh, & Nazir (2015) examines the relationship between capacity building and employee productivity. The study examines capacity building, career development and other extrinsic motivation factors at the workplace as factors that improve the productivity of employees. Middle-level staff were examined using a quantitative approach. The hypotheses of the study were tested using multiple regression analysis methods.

The results revealed that career development and supervisory support had no significant influence on the performance of employee in the banking sector. However, capacity building had a positive significant influence on the productivity of the employee. The current study measured productivity using employee performance which forms an important aspect of the capacity building according to the study.

In Kenya, Otibine (2016) investigated capacity development strategies for productivity. Capacity building is a concept that is multidimensional affecting organisational capability, individual knowledge and expertise as well as governance norms and complementary frameworks. The study aimed at assessing the effect of capacity-building strategies on the relationship with the performance of the Department for International Development (DFID). The study adopted human development theories; dynamic capabilities, knowledge-based theories and capacity-building theories. The result of the study identified the capacity-building strategies in DFID were effective human resource development, financial management, continuous automation of systems as well as information communication and technology management.

The capacity-building strategies enabled accurate financial forecasting, effective programme management, timely fund flows to project beneficiaries and enhanced relationships between employees and employers as well as with project implementation partners and other stakeholders allied to DFID operations in Kenya. The study findings indicate that capacity building has an advanced effect on the performance of firms through improving timeliness as an aspect that was used to measure productivity in the current study. Timeliness assists in ensuring that the sugar organization produce the required product within the desired time.

Onyango, Wanjere, Egessa & Masinde (2015) examined the organizational capabilities and productivity of sugar companies in Kenya. The study aimed at examining the organizational capabilities of the sugar companies' performance in Kenya. A causal-comparative research design was adopted. A purposive sampling method was used to select departmental heads from all the sugar companies in Western Kenya. Primary data was collected using questionnaires and interview schedules. Quantitative data were analyzed using descriptive and inferential statistics. Mean and standard deviation were used in descriptive statistics while Pearson Correlation and Regression analysis were utilized. It was found that organizational capabilities had a positive significant relationship with the productivity of sugar companies. The current study used the productivity of sugar companies in Kenya.

In Kenya, Maiyo (2020) investigated on strategic operations and organizational productivity of sugar companies in Western Kenya. The study aimed at assessing product development, operation risk mitigation and product reengineering in relation to the performance of western sugar companies. The study was guided by resource base view theory, transaction theory and systems theory. Ten sugar firms were targeted and 30 respondents were chosen using

clustered random sampling. Questionnaires were used in data collection. Mean and regression analysis was used.

The results indicated product reengineering, product development and operation risk mitigation had a positive significant effect on the performance of the organization. The productivity of sugar firms was measured using product quality, new production introduction, market share and customer satisfaction. However, the current study measured productivity using the quantity and quality of sugar produced as well as the efficiency and performance of employees.

Otieno (2015) assessed the productivity of sugar factories in Kenya. The study aimed at estimating the production of sugar from 2004 to 2013 by evaluating the growth of sugar factories. The change in productivity was obtained through Data Envelopment Analysis (DEA) approach. There were two stages; the first step was to measure productivity changes and decomposed Total Factor Productivity (TFP) growth; and the second step was to assess exogenous factors affecting TFP growth. To measure the decomposition of the TFP change in TFP was caused by either change in technical efficiency or changes in technical change.

The study also analyzed the size of the industry, factory age, quality of sugarcane, market share and ownership structure in relation to productivity changes among the sugar factories. Findings revealed that the TFP growth index was 0.15% over the period 2004 to 2014 with a technical efficiency growth index of 11.48% and a technical change index of 5.12%. The results revealed that sugar factories were facing productivity growth problems as TFP growth generally remained constant.

TFP growth was mainly influenced by technical change. Government ownership of firms and an increase in factory age negatively affected TFP growth while improvement in cane quality increased TFP growth. Market share and the number of factories in the industry were not significant determinants of TFP changes. The study recommends the privatization of state-owned sugar factories and the improvement of the technical change index through technology adoption and innovation. The current study used employee performance, quality, efficiency and quantity change in production to ascertain productivity.

## **2.4 Conceptual Framework**

The conceptual framework in figure 2.1 illustrates the anticipated or current relationship between the independent, moderating, and dependent variables. In this case, capacity building is hypothesized to represent independent variables, and these include human resource capacity, innovation capacity building, knowledge management capacity building and organizational capacity building. The dependent variable is the productivity of sugar companies in Kenya measured by Profitability, Return on Assets, Return on Investment, Efficiency and Customer Satisfaction. The conceptual framework also illustrates the moderating effect of transformation leadership in terms of inspiration, creativity and motivation on the relationship between the dependent and the independent variable.

**INDEPENDENT**

**CAPACITY BUILDING**

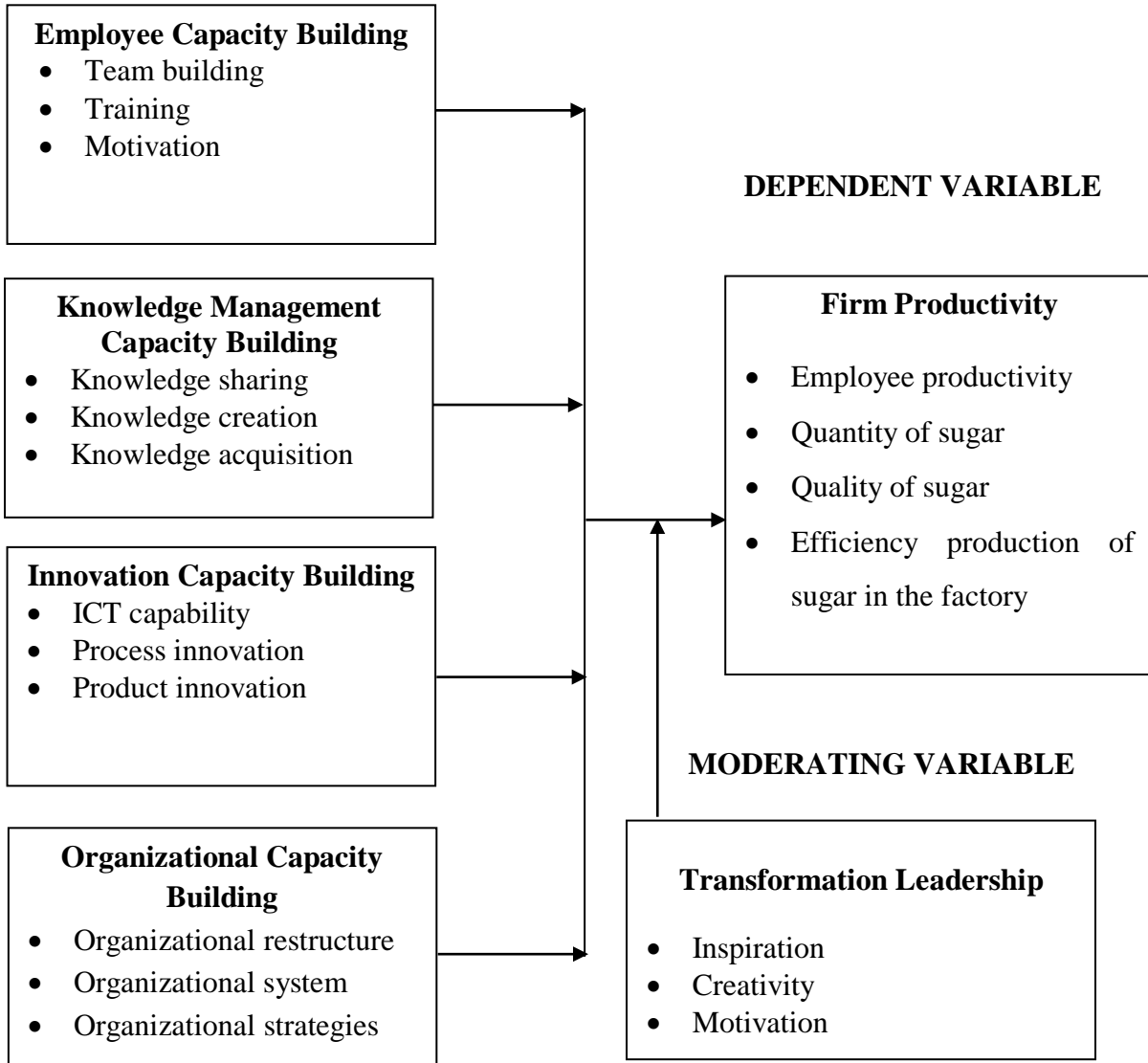


Figure 2.1: Conceptual Framework

Source: Researcher (2023)



## **2.5 Identification of Knowledge Gap**

Extant studies assessing the influence of employee capacity building on organizational performance have established that some elements of employee development had a positive effect on organizational performance. Reviewed literature on employee capacity building (Safkaur & Sagrim, 2019; Sholesi, 2021; Gekonde, Nyamboga & Nyarohoo, 2014; Obor, 2017) mainly focused on performance of an organization rather than productivity. The current study focused on productivity of sugar companies in Kenya which examined the employee productivity, quantity of sugar, quality of sugar and efficiency production of sugar in the factory.

Mouallen and Analoui (2014) conducted a study that focused on employee performance rather than production of organization in the study of employee capacity building and employee performance in Lebanon firms. GeSafkaur and Sagrim (2019) assessed the impact of training on organizational performance. Sholesi (2021) examined the influence of team member training and development practices on performance, while Obor (2017) assessed the impact of HRD practices on performance organizations in the public sector. From their findings, it was revealed that human resource development had a positive effect on performance.

Okoh & Onoriode (2019) also focused on capacity building in relation to human resource management development whereas the current study examined employee capacity building in relation to employee performance. Methodological gaps were found in Gekonde, Nyamboga and Nyarohoo (2014) which used descriptive research design.

The current study adopted a correlation research design. Despite different studies adopting different methodologies, the findings indicate similar results.

Extant literature on knowledge management capacity building were examined on performance (Alaarj & Mohamed, 2017), employee performance (Patwary, et al. 2023) and collaborative innovation community capability building (Deng, Chao & Bai, 2014). Knowledge management and performance of the service sector was investigated by Alaarj & Mohamed (2017) using partial least square modelling. The current study adopted ordinary least square techniques where regression analysis were used. Deng, Chao and Bai (2014) used desk review of literature to examined knowledge management in development of collaborative innovative community. The current study used primary data to examine knowledge management on productivity of sugar companies.

Patwary, et al. (2023) focused on knowledge management practices in relation to employee performance where organization commitment and capacity building culture were the mediating variables. The current study examined knowledge management capacity building and productivity where transformative leadership was the moderating variable. Another study has contextual gap where the study by Harper & Dickson, (2019) focused on health and social care knowledge mobilisation using innovative capacity building model. The current study examined knowledge management capacity building in relation to organization productivity where innovation capacity building an independent variable as the knowledge management capacity building.

A study by Bharadwaj, Chauhan and Raman (2015) on knowledge management capabilities focused more on knowledge management effectiveness among Indian organizations, hence, creating conceptual gap in its effectiveness on productivity. The current study addressed the conceptual gap by examining the relationship between knowledge management capacity building and productivity of sugar companies.

Literature this study reviewed on innovation capacity also did not focus of firm productivity (Brix, 2018; Chadee & Roxas, 2013; Sözbilir, 2018; Forés & Camisón, 2010; Mwawasi, 2014). Contextual gaps were found in the study of Chadee & Roxas (2013) which focused on innovation capacity building on the performance of large Russian firms. The current study focused on the productivity of sugar firms in Kenya. The findings from past studies on human resource development and the productivity of sugar companies indicate a positive statistical relationship between human resource development strategies and the organization's performance. However, these studies have been done in different contexts.

Mwawasi's (2014) main focus was in the context of the education sector while the current study focused on the manufacturing sector while Brix (2018) examined organization learning in relation to innovation capacity building. The context of the current study was on productivity of sugar companies in Kenya.

Conceptual gaps are those developed through differences in the conceptualization of variables established in Sözbilir (2018) which examined the relationship between innovation capacity and innovation performance. The current study focused on the relationship between innovation capacity building and productivity.

Forés & Camisón (2010) focused on innovation capacity as a mediator in relation to internal learning and absorptive capacity on business performance. The current study conceptualized innovation capacity building in relation to productivity and moderated by transformational leadership.

Studies reviewed on organizational capacity building did not focus on productivity of organization but other aspects (Widodo 2022; Hindasah & Nuryakin 2020; Nwankwo, Olabisi, & Onwuchekwa, 2017; Wassem, Baig, Abrar, Hashim, Zia-Ur-Rehman, Awan, & Nawab, 2019; Widodo; 2022; Rommerskirch-Manietta et al. 2021). Hindasah and Nuryakin (2020) and Nwankwo, Olabisi, and Onwuchekwa (2017), in their studies, revealed that institutional development has a positive relationship with performance. On the contrary, the survey by Wassem, Baig, Abrar, Hashim, Zia-Ur-Rehman, Awan, and Nawab (2019) indicates that human development had an insignificant relationship with performance. In a study by Widodo (2022) visionary leadership is examined in relation to organizational capacity development in Covid-19 disruption and industry technology. The current study focused on examining the moderating effect of transformational leadership in relation to the relationship between capacity building and organizational productivity.

The conceptual gap was found in the study by Hudib & Cousins (2022) which examines organization evaluation capacity building while the current study focused on organizational capacity building as an indicator of capacity building. Khaldoun, Nadeen and Long (2019) measured organizational capacity using strategic, financial, human resource and external relation capacities.

The current study on organizational capacity building was in terms of structure, systems and strategic capacity building. Widiyanto, Lestari, Adna, Sukoco and Nasih (2021) used the organizational capacity building as a mediator between dynamic capabilities and firm performance. However, the current study examined organizational capacity building was used as an indicator of capacity building. The study used transformational leadership as a moderating variable in the relationship between capacity building and organization productivity. Rommerskirch-Manietta et al. (2021) used a systematic review, however, the current study adopted a correlation design that used questionnaires to collect primary data.

**Table 2.1:**

*Summary of Empirical Literature Review*

<b>Author</b>	<b>Title / Objectives</b>	<b>Findings</b>	<b>Research Gap</b>	<b>Focus of Current Study</b>
Safkaur & Sagrim (2019)	Human resource capacity building and financial performance	Human Resource Development; that is education and training had positive effects on the company's financial performance.	Descriptive research design was adopted.	Correlation design was used in the current study.
Sholesi (2021)	Human resource capacity development and	Employee training and development practices had	The study focus on foods industry in Ota Ogun, Nigeria.	The current study targeted the management of

<b>Author</b>	<b>Title / Objectives</b>	<b>Findings</b>	<b>Research Gap</b>	<b>Focus of Current Study</b>
	performance of food industry.	positive effect on performance. Hence, effective training method and techniques were proposed.		sugar companies in Kenya.
Obor (2017)	Human resource development on performance of public sector.	Human resource development had positive significance influence on public sector performance.	Descriptive research design of 50 employees in public sector were used as sample.	Correlation reseach design was adopted where 218 sugar industry employees were sampled.
Gekonde, Nyamboga & Nyarohoo (2014)	Strategic human resource and organizational capacity building on public service delivery performance.	Human resource strategies had no significant relationship with public service delivery in Nakuru County, Kenya.	Performance of public sector was examined in relation to both strategic human resource and organizational capacity building.	The current study focused on productivity of sugar firms where employee capacity building was examined.
Okoh & Onoriode (2019)	Capacity building in human resource management among financial	Capacity building improve proficiency of the top management	The study targeted employees of six commercial banks in Nigeria.	The current study focused on sugar firms in Kenya.

<b>Author</b>	<b>Title / Objectives</b>	<b>Findings</b>	<b>Research Gap</b>	<b>Focus of Current Study</b>
	firms in Nigeria.	resulting to better skills and competencies among financial institution.		
Mouallen & Analoui (2014)	Capacity building in human resource management and employee performance.	Effective training and development were employee capacity building practices that improve managerial effectiveness in service delivery.	Employee capacity building was examined on employee performance.	The current study focused on capacity building, transformative leadership on productivity of sugar companies in Kenya.
Alaarj & Mohamed (2017)	Knowledge management capacity and performance of service sector in Malaysia.	Knowledge management resources capacity building had significant relationship with performance of service sector.	Partial least square modelling was adopted in the study.	The current study adopted ordinary least square methodology.
Deng, Chao & Bai (2014)	Knowledge management approach and	Knowledge management had supporting role in	Knowledge management was examined in	Knowledge management capacity building

<b>Author</b>	<b>Title / Objectives</b>	<b>Findings</b>	<b>Research Gap</b>	<b>Focus of Current Study</b>
	innovation community capacity building.	supporting collaborative innovation community capacity building through using knowledge activities and artefacts.	relation to innovation community capacity building.	was examined in the current study.
Patwary, et al. (2023)	Knowledge management practices, organization commitment and capacity building on employee performance.	Knowledge management had positive significant effect on employee performance where organization commitment and capacity building culture were the mediators.	The study examined knowledge management in relation with employee performance among Malaysian hotel industry.	The current study focused on productivity of sugar companies in Kenya in relation to knowledge management capacity building as one of capacity building practices.
Harper & Dickson, (2019)	Capacity building for knowledge management mobilisation in health and social care.	Evidence-informed practice change and learning for individual, organization and local communities	The study examined capacity building for knowledge management mobilisation in	In the current study, knowledge management capacity building was examined on productivity of sugar



<b>Author</b>	<b>Title / Objectives</b>	<b>Findings</b>	<b>Research Gap</b>	<b>Focus of Current Study</b>
		through innovative capacity building model for effective knowledge mobilisation in health and social care.	health and social care.	firms.
Bharadwaj, Chauhan & Raman (2015)	Knowledge management capabilities and knowledge management effectiveness in Indian organizations.	Infrastructural capabilities and process capabilities in knowledge management capacity building played a big role in enhancing knowledge management effectiveness in the organizations.	Knowledge management capabilities was examined on knowledge management effectiveness in the organization.	The current study focused on knowledge management capacity building on productivity of sugar companies in Kenya.
Brix (2018)	Innovation capacity building and organizational learning.	Innovation capacity building had positive impact on local organization	The study investigated innovation capacity building in relation to	The current study focused on innovation capacity building on the productivity of sugar

<b>Author</b>	<b>Title / Objectives</b>	<b>Findings</b>	<b>Research Gap</b>	<b>Focus of Current Study</b>
		context for ambidexterity and negative impact on interactions requirement.	organizational learning.	companies.
Chadee & Roxas (2013)	Institutional environment, innovation capacity and performance of Russian firms’.	Corruption, laws and regulatory quality had strong negative influence on innovation capacity building and firm’s performance. However, innovation capacity mediated the effect of institutional environment and performance of the firms.	The study was done on performance of Russian firms where innovation capacity was treated as mediating variable.	Innovation capacity building was part of capacity building which was examined on the productivity of sugar firms in Kenya.
Sözbilir (2018)	Innovation capacity and innovation performance.	Innovation capacity had positive significant influence on	Innovation capacity was examined on innovation	In the current study innovation capacity building and productivity of the

Author	Title / Objectives	Findings	Research Gap	Focus of Current Study
		innovation performance.	performance.	sugar companies.
Forés & Camisón (2010)	Internal learning capacity and absorptive capacity on performance.	Absorptive capacity and internal learning capacity had joint effect on innovation capacity in industry firms in Spain. Innovation capacity had moderating effect on relationship between learning capacities and performance.	Innovation capacity building was the moderating component between internal learning capacity and performance of the Spain firms.	The current study examined innovation capacity building as independent variable where transformational leadership was the moderating variable in relation to productivity of sugar companies in Kenya.
Mwawasi (2014)	Technology leadership and ICT integration in Kenya	School leadership improved innovation through training teachers on using ICT facilities and integrating ICT in learning and teaching process in	The study was done in public secondary schools in Kenya.	The current study focused on sugar manufacturing firms in Kenya.

<b>Author</b>	<b>Title / Objectives</b>	<b>Findings</b>	<b>Research Gap</b>	<b>Focus of Current Study</b>
		public secondary schools in Kenya.		
Widodo (2022)	Organizational capacity development on visionary leadership in education and training.	Competency in organization capacity development significantly assisted the industries. Visionary leaders were found to assist organizational capacity building in the macro-economic business environment.	Visionary leadership was examined on organizational capacity development in Indonesia.	In the current study organizational capacity building was examined on productivity of sugar companies in Kenya where transformation leadership was the moderator.
Hindasah & Nuryakin (2020)	Organizational capability and SMEs' financial performance in Korea.	Organizational capability had a positive significant influence on financial performance of Korean SMEs.	SMEs' financial performance was examined in relation to organization capabilities.	The current study focused on productivity of sugat firms in Kenya.
Rommerskirch-	Organizational	There was	Organizational	The current study

<b>Author</b>	<b>Title / Objectives</b>	<b>Findings</b>	<b>Research Gap</b>	<b>Focus of Current Study</b>
Manietta et al. (2021)	capacity building and promotion of resident mobility.	heterogenous and inconsistent effect of organizational capacity building on the growing nursing staff capacity and resident mobility.	capacity building was examined on nurse resident mobility through a systematic review of related literature.	examined organization capacity building on the productivity of sugar firms in Kenya using primary data.
Khaldoun, Nadeen & Long (2019)	Organizational capacity and scope among Lebanese non-profit firms.	Human resource and external relationship capacities had significant relationship with a single domain organization while strategic planning and a financial capacities had significant relation with multiple-domain organizations.	Organization capacity was examined based on single-domain organizations and multi-domain organizations.	The current study adopted organizational strategies, structure and systems were the indicators for organization capacity building.
Widianto, Lestari, Adna, Sukoco &	Dynamic managerial	Organizational capacity building	Organizational capacity building	The current study used organizational

<b>Author</b>	<b>Title / Objectives</b>	<b>Findings</b>	<b>Research Gap</b>	<b>Focus of Current Study</b>
Nasih (2021)	capabilities, organizational capacity for change and organizational performance	had mediating effect on the relationship between dynamic managerial capacity and performance of organization.	is a mediator on the relationship between dynamic managerial capabilities and performance.	capacity building was examined on productivity and moderated by transformational leadership.
Hudib & Cousins (2022)	Policy and organization evaluation of capacity building.	Evaluation policy was associated with evaluation capacity building adopted this affected the evaluation literacy, organization decision making and learning benefit.	Policy and organizational evaluation capacity building was examined multilateral and bilateral aid agencies.	The current study focused on organizational capacity building in relation to proctivity of sugar company-es.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter discusses the overall strategy that was used in data collection, analysis, interpretation, and presentation. The subsections in this chapter include the research philosophy that was adopted, the research design, the location of the study, sample size and sampling procedure used in the study, data collection instruments, and procedure. Data analysis and ethical considerations while carrying out the study are also discussed in this chapter.

#### **3.2 Research Design**

This study adopted a positivist research philosophy. This philosophy holds that truthful knowledge can only be obtained through observation and measurement. In this philosophy, the researcher's role is to collect data and interpret it in such a manner that the objectives of the study would be achieved. In other words, the researcher undertakes the role of an analyst and therefore distances himself from the study (Saunders, Lewis., Thornhill, & Bristow, 2015). The findings from studies that have adopted this research philosophy are always quantifiable and explanatory.

This approach requires a thorough focus and examination of facts, establishes causality and reduces the phenomenon to simple and comprehensible elements, formulates hypotheses and tests them to arrive at an informed conclusion (Kothari, & Garg, 2014). The philosophy was

adopted because the study is based on an already existing body of knowledge. The study used quantitative tools when measuring the research variables.

The researcher reviewed literature from previous related studies to develop a conceptual model that led to the formulation of the hypotheses, which was tested using statistical techniques for either rejection or failure to reject. The role of a researcher under the positivist approach or paradigm is the use of a clear qualitative and quantitative approach in investigating a phenomenon.

The study adopted a correlational research design to assess the relationship between the dependent and independent variables. This adopted a quantitative research method which allowed the research to manipulate quantitative data. According to Rahi (2017), the design aids in investigating the relationship between variables without manipulating or controlling any of them. In addition, Creswell (2017) states that the correlational research design is used to establish the extent to which two or more variables are related where the outcome can indicate a positive, negative, or no correlation between the variables. Henry, Nagai, Matsumoto, & Yokota (2020) and Roberts (2022) have successfully used the research design to establish the causal relationship among their research variables.

### **3.3 Location of the Study**

The study was carried out in Kenya in the Western and Nyanza regions where sugarcane is grown and processed. Sugar companies in Kenya are primarily located in the western and coastal regions of the country. In Western Kenya the sugar companies cover Kakamega, Bungoma, Busia, and Vihiga Counties.



These areas have fertile soils and receive moderate to high rainfall, making them suitable for sugarcane cultivation. Coastal counties such as Kwale, Kilifi, and Taita Taveta also have sugarcane cultivation due to their favorable climate and access to water sources.

The sugarcane cultivation requires specific climatic conditions in tropical and subtropical climates. It prefers temperatures between 20°C and 30°C (68°F to 86°F) with a significant amount of water. It grows best in areas with an annual rainfall of 1,000 to 2,000 mm (39 to 79 inches). The study was limited to all eight out of 10 sugar companies that are workingsince Nyanza and Mumias sugar companies closed at the time of study due to indebtedness to farmers and creditors. Hence, the study covered the Western and Nyanza regions where sugarcane is grown.

### **3.4 Target Population**

A target population is the total elements of interest to the researcher. The study targeted all the employees working in operating sugar companies in Kenya. The study targeted 218 managers in 8 sugar companies from the Western and Nyanza region of Kenya. This respondents were acquired from human resource records from each of the sugar company in 2022/23. Sugar companies formed the unit of analysis while employees at different levels of management were used as the unit of observation. Eight out of ten sugar companies in Kenya were selected for the study since the other two had closed.

### 3.5 Sample and Sampling Procedures

The study adopted a census survey where all 218 employees was used in the study. Census is sampling procedure that used all the respondents. In this case, with a relatively small number of individuals comprising the population of interest, conducting a census ensures that every member of the population is included in the study. This approach provides a comprehensive understanding of the characteristics, behaviors, and attitudes of the entire population, without the need for statistical inference or sampling methods. The population framework used is presented in Table 3.1.

**Table 3.1:**

*Population Framework*

No.	Sugar Companies	Management Level			Total
		Top	Middle	Lower	
1	West Kenya Sugar Company	4	7	18	<b>29</b>
2	Butali Sugar Mills	3	6	16	<b>25</b>
3	Kibos Sugar and Allied Industries Limited	2	5	15	<b>22</b>
4	Sukari Industries Limited	2	6	16	<b>24</b>
5	Transmara Sugar Company	2	6	18	<b>26</b>
6	Nzoia Sugar Factory	3	6	19	<b>28</b>
7	Muhoroni Sugar Company	3	7	21	<b>31</b>
8	Chemelil Sugar Factory	3	7	23	<b>33</b>
Target Population		<b>22</b>	<b>50</b>	<b>146</b>	<b>218</b>

Source: HR Records Adopted from Sugar firms HR Records (2022)

### **3.6 Data Collection Instruments**

Data collection refers to the process of gathering data from different relevant sources to aid in hypothesis testing or to find answers to the research questions (Kothari, 2008). The study used questionnaires to collect primary data. Primary data refers to data that is collected for the first time.

This type of data enables the researcher to obtain unique and fresh information (Rahi, 2017). The study used a structured questionnaire to collect this type of data. The structured questionnaire is considered ideal since it leads to a high response rate and is more reliable and yields accurate data. This is made possible because it contains straightforward questions that make it easy to collect data.

The questionnaire that was used in this study contained two parts. Part one collected demographic information regarding the sugar companies such as the year of incorporation, services rendered by the company, and the number of departments. Part two of the questionnaire contained five sections to collect information regarding the study's objectives. The questionnaire had a five-point Likert scale with the highest point being five (5) indicating strongly agree and the lowest point one (1) indicating strongly disagree.

### **3.6.1 Validity of the instrument**

According to Saunders et al. (2014) validity is the extent to which an instrument measures what it is supposed to measure. It is the accuracy of the results which an instrument produces. If a study's instrument has high validity, it means that it can produce results that correspond to actual life characteristics, variations, and real properties in the physical world. An instrument's validity is classified into content validity, construct validity, criterion validity, and face validity.

Content validity in a study refers to the extent to which an instrument covers the context under study. Content validity was examined by the supervisors and experts to check if the appropriated content is captured by the questionnaire. Construct validity is the extent to which a study measures the target construct. The supervisors examined the conceptualized indicator and how it is represented in the questionnaire. Criterion validity, also known as instrument validity, measures the quality of the method used in the measurement. The accuracy of the method used in measuring is compared with a measure that has already been identified as valid.

The researcher involved statisticians and research experts to examine how well the measure can be used to obtain the recommended objective. Finally, face validity indicates the extent to which results seem valid from their face value. In this study, validity was enhanced through an extensive literature review and consultation with the subject experts and lecturers in Human Resource Department.

### **3.6.2 Pilot study**

According to Mugenda and Mugenda (2013), a pilot study is a mini-study carried out before a final full-scale study. The main objective of carrying out a pilot study is to establish the reliability of the instruments that were used for data collection, that is, the questionnaire. The study was also done to assess and improve the efficiency and effectiveness of the data collection exercise. In this study, 10% (22) of respondents from Kabaras sugar firms not covered in this study was used for the pilot study. The questionnaire were coded and entered into Statistical Package for Social Sciences (SPSS) for further examination of validity and reliability.

### **3.6.3 Reliability of the instrument**

Reliability refers to the consistency or the degree to which a research instrument or instruments produce consistent and stable results each time it is put in use. According to Saunders et al. (2014), a measure is reliable if it produces consistent results on several trials when measuring a similar phenomenon. There are three main types of reliability; test-retest reliability which is used to measure the instrument's reliability over a period, internal consistency, which is used to measure reliability across the items in the research instrument and finally, inter-rater reliability, which is used to measure the reliability of the instrument across different studies. Internal consistency was used to measure the reliability of the instrument.

Internal consistency is considered ideal when using a questionnaire that contains different items. Hence, 22 questions that were piloted were analyzed using SPSS in which Cronbach

alpha was obtained. The Cronbach alpha coefficient was used to measure the item's internal consistency. According to Mugenda and Mugenda (2013), when an instrument has achieved an alpha coefficient of 0.7 and above it is deemed reliable.

### **3.7 Data Collection Procedure**

Data collection commenced once the research has obtained a clearance letter from the Board of Graduate Studies of the University of Kabianga and subsequently from the National Commission for Science, Technology and Innovation. The researcher then proceeded to the sugar firms headquarters to collect information using a primary data collection instrument (questionnaire). The instrument was administered using the drop-and-pick technique to enable the researcher to collect information from a larger sample within a short period.

### **3.8 Data Analysis and Presentation**

Once the data collection exercise had been completed, the questionnaires were checked thoroughly to identify those that were not filled well or according to instructions. They were then coded into SPSS version 26 in readiness for analysis. Data was analyzed using descriptive statistics such as frequencies, means, and standard deviation to describe the study variables. Also, inferential statistics were carried out by adopting correlation and regression analysis to examine the relationship between the study variables. The findings from data analysis were presented using tables, pie charts, and graphs.

### 3.8.1 Empirical model

Simple linear regression model was adopted in testing the first to the fourth hypotheses while multiple regression model was adopted as confirmatory evidence of the relationship.

The regression model that were adopted for data analysis is indicated below;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon \dots \dots \dots (3.1)$$

$$Y = \beta_0 + \beta_2 X_2 + \varepsilon \dots \dots \dots (3.2)$$

$$Y = \beta_0 + \beta_3 X_3 + \varepsilon \dots \dots \dots (3.3)$$

$$Y = \beta_0 + \beta_4 X_4 + \varepsilon \dots \dots \dots (3.4)$$

Where;

Y = Organization productivity

X<sub>1</sub> = Employee capacity building

X<sub>2</sub> = Knowledge Management Capacity Building

X<sub>3</sub> = Innovation Capacity Building

X<sub>4</sub> = Organizational capacity Building

β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub> and β<sub>4</sub> represent the regression coefficients

ε = Error Term

### 3.8.2 Moderating effect model

The study assessed the moderating effect of transformational leadership on the relationship between capacity-building strategies and the productivity of sugar companies in Kenya. The two step approach recommended by Baron and Kenny (1986) was adopted. In the first model, a direct relationship between the variables was examined as presented in equation 3.5. Then model two capacity building strategies and transformational leadership was regressed on the productivity of the sugar companies to assess the effect of the moderating variable on the relationship between the independent variable and the dependent variable. This is shown in equation 3.6.

#### Step One

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \dots \dots \dots (3.5)$$

Where;

Y=Organizational productivity

X<sub>1</sub>= Employee capacity building

X<sub>2</sub>= Knowledge Management Capacity Building

X<sub>3</sub>= Innovation Capacity Building

X<sub>4</sub>= Organizational Capacity Building

β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub> and β<sub>4</sub> represent the regression coefficients



$\varepsilon$  = Error Term

**Step two**

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_1 * M + \beta_6 X_2 * M + \beta_7 X_3 * M + \beta_8 X_4 * M + \varepsilon \dots \dots \dots (3.6)$$

Where;

Y= Organizational performance

X<sub>1</sub>= Employee capacity building

X<sub>2</sub>= Knowledge Management Capacity Building

X<sub>3</sub>= Innovation Capacity Building

X<sub>4</sub>= Organizational Capacity Building

M= Transformational leadership

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6,$  and  $\beta_7$  represent the regression coefficients

$\beta_5 X_1 * M$  = is the interaction between transformational leadership and employee capacity building

$\beta_6 X_2 * M$  = is the interaction between transformational leadership and knowledge management capacity building

$\beta_7 X_3 * M$  = is the interaction between transformational leadership and innovation capacity building

$\beta_8 X_4 * M$  = is the interaction between transformational leadership and organizational capacity building

$\epsilon$  = Error Term

**Table 3.2:**

*Acceptance Criteria for the Moderating Effect*

<b>Results</b>	<b>Coefficients</b>	<b>Significant</b>	<b>Conclusion</b>
Model 3.5	$\beta_5, \beta_6, \beta_7$ and $\beta_8$	F-Change, $P > 0.05$	There is no moderating effect
Model 3.6	$\beta_5, \beta_6, \beta_7$ and $\beta_8$	F-Change, $P < 0.05$	There is moderating effect

Source: Baron and Kenny (1986)

### 3.8.3. Diagnostic tests

The empirical model that involves multiple linear regression analysis must achieve the following assumption before adopting the normal distribution, linear in nature, no auto-correlation, homogeneity in variance and no multi-correlation. Therefore, the study was diagnosed using a normality test, linearity test, autocorrelation test, homoscedasticity test and multi-correlation test respectively. The tests were based on the set criterion that must be

achieved before utilizing the multiple linear regression analysis forming a decision rule indicated in the following subsections:

#### **3.8.3.1. Normality Test**

The normal distribution is a condition where the data collected assumes an inverted bell shape on the normal curve. In this case, the mean, mode and median are equal to the response data making a symmetrical shape on the normal curve. Numerous tests can be adopted but the study preferred the Shapiro-Wilk test since it is commonly used in small populations making it sensitive and accurate to detect normality in small data collected. The decision criteria for normality to exist is when significance is more than 5%.

#### **3.8.3.2 Linearity Test**

Linearity in multiple linear regression must be tested before adopting other nonlinear multiple regression. Even though there are numerous methods of ascertaining linearity ANOVA test of linearity becomes a conclusive method based on the decision rule. The linearity of the relationship were obtained through the ANOVA test of linearity based on the decision rule, the significant level of linearity f-value should be less than 5% ( $P < 0.05$ ) for it to be linear.

#### **3.8.3.3. Autocorrelation Test**

Autocorrelation is a random error that affects the relationship between variables in multiple regression analysis, especially on a series of data. Autocorrelation resulted in erroneous results that affect the accuracy of the multiple linear regression model. This error was

examined using the Durbin-Watson coefficient. The decision rule is that the Durbin-Watson coefficient must be between 1.5 to 2.5 for no autocorrelation.

#### **3.8.3.4. Homoscedasticity Test**

Homoscedasticity is the test of homogeneity of variance along the multiple regression lines between variables. The variation of residual errors in the regression line should be evenly distributed along regression linearly between predictors and dependent variables. Levene's test was appropriate based on its ability to test multiple regression predictors against the dependent variable and measure the errors resulting from a decision rule. Levene's test significant level must be above 5% for a homoscedastic relationship between the variable otherwise it would be heteroscedastic.

#### **3.8.3.5. Multi-Collinearity Test**

Multiple linear regression analysis must be tested against multiple collinearities that might exist between the independent variables. Therefore, if there is high collinearity between the independent variable, it would result in multiple collinearities meaning there is more than one dependent variable in the study. This would result in biases in the selection of variables resulting in the erroneous result. The study used the Variance Inflation Factor (VIF) where the decision rule is that  $1 < VIF < 5$  for no multi-collinearity.

### **3.9 Ethical Consideration**

While conducting the study, the researcher adhered to all ethical issues. Before the data collection exercise, the researcher obtained a clearance letter from the Board of Graduate

Studies from the University of Kabianga. The clearance letter also aided the researcher to obtain other necessary permits, including a permit from the National Commission, Science, Technology and innovation (NACOSTI).

During the study, the researcher also ensured that no participant used in the research is subjected to any harm. While carrying out the research, the dignity of the respondents was upheld. Consent was obtained from the respondent before the data collection exercise. The research assured the respondents of the privacy and confidentiality of the information that was collected. The research assist ensure code of conduct during data collection to further improve on the privacy of data.

Confidentiality of the collected data was enhanced by reminding the respondents not to indicate their names or provide an element of identification on the research instrument. Finally, a declaration, acknowledgement, and disclosure with any third party and funding source for the study was made before the data collection exercise.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSIONS**

#### **4.1 Introduction**

Findings from the questionnaires are represented in this section. The findings are subdivided into the response rate, demographic results, descriptive analysis, and inferential analysis. The descriptive findings were presented using a table and a graph. Consequently, the descriptive analysis section provides the mean and standard deviation of employee capacity building, knowledge management capacity building, innovation capacity building, organization capacity building, transformative leadership, and organizational performance. These represent descriptive analysis for objectives one to five before testing their hypotheses to achieve the desired results using inferential statistics. The inferential statistics, which comprise correlation analysis as well as multiple regression analysis, adopt a significant level of 5%.

#### **4.2 Response Rate**

The study employed 218 questionnaires, with 194 questionnaires returned. This resulted to a response rate of 89%, which was excellent for the researcher to continue with further analysis. Sammut, Griscti, and Norman (2021) argue that a response above 80% is excellent for further analysis. Therefore, the researcher continued with further descriptive and inferential analysis, as presented in the following sections.

### 4.3 Diagnostic Tests

The study examined numerous diagnostic tests to examine the reliability of the results as well as the appropriateness of using the data for regression analysis. The diagnostic test for reliability of the instrument would assist in obtaining reliable data. The reliability test was presented in Table 4.1.

**Table 4.1:**

*Reliability Test*

<b>Variables</b>	<b>Cronbach Alpha</b>	<b>Items</b>
Employee capacity building (ECB)	0.701	7
Knowledge Management Capacity Building (KMCB)	0.827	7
Innovation Capacity Building (ICB)	0.739	7
Organization Capacity Building (OCB)	0.803	6
Transformational Leadership (TL)	0.792	6
Organizational Productivity (OP)	0.789	5

According to the results, employee capacity building, knowledge management capacity building, innovation capacity building, organization capacity building, transformational leadership and organizational productivity were reliable (Cronbach Alpha > 0.7). This is because the results were above the threshold of 0.7 as proposed by Mugenda and Mugenda (2013).

### 4.3.1 Normality Test

Normality test results remain crucial in parametric analysis since there data need to assume normal distribution. The results obtained were tested using Shapiro-Wilk test which is appropriate for small populations as compared to Kolmogorov-Smirnov test. The results were presented in Table 4.2 which was tested using a significant level of 5% where the null hypothesis indicates that there is distribution that is not normal.

**Table 4.2:**

#### *Normality Test Results*

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ECB	.152	194	.084	.859	194	.078
KM	.231	194	.204	.907	194	.106
CB	.128	194	.059	.853	194	.067
ICB	.187	194	.091	.870	194	.083
OCB	.191	194	.188	.901	194	.098
TL	.133	194	.067	.856	194	.069
OP						

a. Lilliefors Significance Correction

The results in Table 4.2 revealed that employee capacity building (ECB), knowledge management capacity building (KM), innovation capacity building (ICB), organization capacity building (OCB), transformational leadership (TL) and organizational productivity (OP) were all extracted from normal distribution ( $P > 0.05$ ). Hence, the data was appropriate for further linear regression analysis.



### 4.3.2 Linearity Test

ANOVA linearity test analysis was conducted to examine whether employee capacity building, knowledge management capacity building, innovation capacity building and organization capacity building exhibited linear relationship with organizational productivity. This requirement is a preliquisite for adoption of linear regression model which was tested using a significant level of 5%. The results were presented in Table 4.3 where the null hypothesis stated that there was no significant linear relationship between capacity building variables and organizational performance.

**Table 4.3:**

*Linearity ANOVA Test Results*

		<b>F</b>	<b>Sig.</b>
OP * ECB	Linearity	297.343	.000
OP * KMCB	Linearity	959.673	.000
OP * ICB	Linearity	387.441	.000
OP * OCB	Linearity	979.950	.000

Table 4.3 results indicated that organizational performance (OP) had significant linear relationship with employee capacity building (ECB), knowledge management capacity building (KMCB), innovation capacity building (ICB), organization capacity building (OCB) ( $P < 0.05$ ). Hence, the results were appropriate to be adopted in any linear regression model.

### 4.3.3 Autocorrelation Test

Autocorrelation was examined on the multiple regression model to ensure that autocorrelation error does not occur. This error was examined using the Durbin-Watson coefficient. The decision rule is that the Durbin-Watson coefficient must be between 1.5 to 2.5 for no autocorrelation. According to the results, the multiple regression between capacity development variable and organization performance had Durbin Watson of 2.496 which indicated lack of autocorrelation error. The individual simple linear regression were also ascertained and the results were indicated in Table 4.4.

**Table 4.4:**

#### *Autocorrelation Test Results*

<b>Variables</b>	<b>Durbin Watson Coefficient</b>	<b>Decision Rule</b>	<b>Recommendations</b>
OP * ECB	1.725	1.5<d<2.5	No Auto-Correlation
OP * KMCB	1.820	1.5<d<2.5	No Auto-Correlation
OP * ICB	2.312	1.5<d<2.5	No Auto-Correlation
OP * OCB	2.431	1.5<d<2.5	No Auto-Correlation

The results further revealed that individual simple linear regression relationship between organizational performance and employee capacity building (ECB), knowledge management capacity building (KMCB), innovation capacity building (ICB), organization capacity building (OCB) ( $P < 0.05$ ) had no auto-correlation effect. Hence, the results was appropriate for further regression analysis.

#### 4.3.4 Homoscedasticity Test

The data were also further diagnosed for homogeneity or heterogeneity of variation between the independent variable on the multiple regression model. Levene's test was used on a significant level of 5% for a homoscedastic relationship between the variable otherwise it would be heteroscedastic. This was represented in Table 4.5.

**Table 4.5:**

*Test of Homogeneity of Variances*

	<b>Levene Statistic</b>	<b>df1</b>	<b>df2</b>	<b>Sig.</b>
ECB	18.090	9	184	.112
KMCB	34.349	9	184	.236
ICB	4.038	9	184	.063
OCB	41.581	9	184	.438

According to the results in Table 4.5, employee capacity building (ECB), knowledge management capacity building (KMCB), innovation capacity building (ICB), organization capacity building (OCB) were all homogenous on organizational performance (OP) ( $P > 0.05$ ). Hence, the study could be used to derive regression analysis to examine the relationship between variables.

#### 4.3.5 Multi-Collinearity Test

Diagnosis of multi-collinearity was used to examine if there existed collinearity among the independent variable which might affect the adoption of multiple linear regression analysis.

This independence of the independent variables was tested using Variance Inflation Factor (VIF) where the decision rule is that  $1 < \text{VIF} < 5$  for no multi-collinearity. The results were presented in Table 4.6.

**Table 4.6:**

*Collinearity Statistics Results*

<b>Model</b>		<b>Collinearity Statistics</b>	
		<b>Tolerance</b>	<b>VIF</b>
1	ECB	.385	2.596
	KMCB	.306	3.272
	ICB	.358	2.793
	OCB	.410	2.439

a. Dependent Variable: OP

Table 4.6 results indicated that employee capacity building (ECB), knowledge management capacity building (KMCB), innovation capacity building (ICB), organization capacity building (OCB) were independent and had no multi-collinearity ( $\text{VIF} < 10$ ). Hence, none of the independent variables were related to one another hence multiple linear regression was appropriate in testing the relationship between the independent variable and dependent variables.

#### 4.4 Demographic Information Results

The demographic data consisted of the distribution of respondents in terms of the sugar firms and the duration of working in the respective sugar firms. The results for the distribution of the respondents as per the firm are presented in Table 4.7.

**Table 4.7:**

*Distribution of the Respondents*

Sugar Firms		Frequency	Percent
Valid	West Kenya	25	12.9
	Chemelil	26	13.4
	Nzoia	26	13.4
	Kibos	22	11.3
	Muhoroni	27	13.9
	Sukari	23	11.9
	Butali	25	12.9
	Transmara	20	10.3
Total		194	100.0

According to the results in Table 4.7 above, the eight sugar firms had responses ranging from 20 (10.3%) to 27 (13.9%). This indicates an equitable presentation of the respondent, which is appropriate in generalizing the study. Further results on the duration of working in the firm were also evaluated and presented in Figure 4.1.



Figure 4.1: Duration of Working in the Firm

As per the results in Figure 4.1, 46.91% of the respondents had worked between 5 and 10 years in the sugar industry. Consequently, 27.84% of the respondents had worked for over nine years, and 25.26% had worked for less than four years. The findings reveal that 46.91%, representing the majority of employees, had worked in the industry within 5–10 years.

#### 4.5 Descriptive Analysis

Employee capacity building, knowledge management capacity building, innovation capacity building, organization capacity building, transformational leadership, and organizational productivity were analyzed using descriptive analysis. This was presented using a percentage frequency based on a Likert scale where 1, 2, 3, 4 and 5 were strongly disagree, disagree, neutral, agree and strongly agree respectively. The results were further used to compute the sample mean and standard deviation, which assisted in interpreting the nature of the objectives. According to McGrath, Zhao, Steele, Thombs, & Benedetti (2020), the sample mean and standard deviation play an important role in understanding the objective, mainly based on the agreeability level as well as variation across the sugar firms. The sample mean

and standard deviation based on central theory can be generalized for the entire population, which is the sugar industry in Kenya. Hence, these specific features of the firms are outlined in the following variables:

#### 4.5.1 Employee capacity building

Employee capacity building results, which were presented in Table 4.8, assisted in making necessary interpretations. The results of the sample mean and standard deviation were assessed with a view to understanding employee capacity building in the sugar industry.

**Table 4.8:**

#### *Employee Capacity Building Descriptive Results*

Questions	5(SA)	4 (A)	3 (N)	2 (D)	1 (SD)	Mean	STD
The sugar firm has used team-building activities to ensure a cohesive workforce.	14(7.2%)	133(68.6%)	47(24.2%)	0(0.0%)	0(0.0%)	3.8299	.53570
The firm conducts on and off-the-job training to enhance employee capacity building resulting in high organisational productivity	28(14.4%)	164(84.5%)	2(1.0%)	0(0.0%)	0(0.0%)	4.1340	.37066
New employees are provided with induction programmes that enhance their productivity.	112(57.7%)	43(22.2%)	29(14.9%)	10(5.2%)	0(0.0%)	4.3247	.91204
We motivate employees for improved productivity.	32(16.5%)	113(58.2%)	46(23.7%)	3(1.5%)	0(0.0%)	3.8969	.67501
There are frequent periodic job reviews to motivate employees which enhances good productivity.	0(0.0%)	65(33.5%)	67(34.5%)	62(32.0%)	0(0.0%)	3.0155	.81104
Employee retention enhances capacity building leading to high productivity.	19(9.8%)	92(47.4%)	55(28.4%)	28(14.4%)	0(0.0%)	3.5258	.85888
Employee capacity development has led to improved productivity for the sugar company.	9(4.6%)	117(60.3%)	68(35.1%)	0(0.0%)	0(0.0%)	3.6959	.55317

*Key: 1 = Strongly Disagree (DS), 2= Disagree (D), 3= Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA), STD = Standard Deviation.*

Table 4.8 showed that 68.6% of the sugar firms agreed to using team-building activities to create cohesiveness in the workforce. Subsequently, this was confirmed by a mean of 3.8299 and a standard deviation of 0.53570, which shows that there is low variation in team-building activities in the sugar firms as a human resource capacity-building strategy. Team-building activities are crucial to achieving cohesion, not only in the sugar industry's manufacturing section but also in the service industry.

A considerable 84.5% of the respondents confirmed the use of on-and-off-the-job training to enhance employee capacity building, resulting in high organizational productivity. A mean of 4.1340 and a standard deviation of 0.37066 implied that on-and-off-the-job training were conducted homogenously across the sugar industry as a human resource capacity-building strategy. The adoption of on-and-off-the-job training assists in improving the productivity of firms. Safkaur and Sagrim (2019) concur that training remains an important concept of human resource capacity beside education in improving financial performance of SMEs in Indonesia. However, the study focused on financial performance rather than organization productivity. The current study also focused on both on-and-off-the-job training which was important in improvement of sugar companies productivity. Similarly, Sholesi (2021) concurred that in fact training in terms of training methods and techniques improve performance of firms in Nigeria.

Firms were also found to conduct induction programs for new employees that enhance their productivity, as strongly agreed upon by 57.7% of the respondents. The sample mean of 4.3247 and standard deviation of 0.91204 further revealed that the induction programs were low across the sugar firms, which was crucial in enhancing productivity.



A high response of 58.2% agreed that the sampled sugar firms motivated employees, which led to improved productivity. The sample mean of 3.8969 and standard deviation of 0.67501 indicate moderate variation among sugar firms, as most of them motivated their employees. It implies that sugar firms ensure that their employees are motivated at work.

According to the results, 34.5% of respondents were neutral on the frequency of periodic reviews. Consequently, those who agreed were 33.5% and those who disagreed were 32.0% on the frequency of reviews of employee motivation. Arguing by the mean of 3.0155 and standard deviation of 0.81104, the firms varied in their review frequency; however, there were slightly more firms that reviewed their employee motivation than those that did not review.

In response to the question of whether employee retention enhanced capacity building, leading to high productivity, 47.4% agreed that it led to higher productivity. Consequently, a mean of 3.5258 and a standard deviation of 0.85888 implies that employee retention was different across the sugar industry. Further, the review of employee capacity development as agreed by 60.3% led to improved productivity for sugar companies. The mean of 3.6959 and standard deviation of 0.55317 showed that employee capacity development plays a crucial role in improving productivity in the sugar industry.

#### **4.5.2 Knowledge Management Capacity Building**

Knowledge management capacity building was examined using percentage frequency, mean, and standard deviation. This was used to understand the rate of agreeability to knowledge management and capacity building concepts in the sugar industry.

**Table 4.9:***Knowledge Management Capacity Building Descriptive Results*

Questions	5 (SA)	4 (A)	3 (N)	2 (D)	1 (SD)	Mean	STD
The firms have developed sufficient infrastructure that can retrieve, store and acquire knowledge.	0(0.0%)	88(45.4%)	59(30.4%)	47(24.2%)	0(0.0%)	3.2113	.80906
The employees are well empowered to improve creativity leading to the creation of new knowledge in the firm.	2(1.0%)	69(35.6%)	99(51.0%)	34(12.4%)	0(0.0%)	3.2526	.67764
Knowledge is shared in the firm to enable high skills labour to be maintained.	14(7.2%)	140(72.2%)	21(10.8%)	19(9.8%)	0(0.0%)	3.7680	.72184
The sugar industry rewards ideas and new knowledge creation to improve the firm's productivity.	0(0.0%)	24(12.4%)	88(45.4%)	82(42.3%)	0(0.0%)	2.7010	.67777
The firm has a knowledge management system that stores and manages knowledge activities.	0(0.0%)	42(21.6%)	82(42.3%)	70(36.1%)	0(0.0%)	2.8557	.74791
Employees are provided with an appropriate source of knowledge that encourages the acquisition of knowledge.	0(0.0%)	69(35.6%)	97(50.0%)	28(14.4%)	0(0.0%)	3.2113	.67653
The firm has improved knowledge management capacity building through different knowledge activities.	0(0.0%)	59(30.4%)	125(64.4%)	10(5.2%)	0(0.0%)	3.2526	.54165

*Key: 1 = Strongly Disagree (DS), 2= Disagree (D), 3= Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA), STD = Standard Deviation.*

Table 4.9 revealed that 45.4% of the firms agreed to have developed sufficient infrastructure to retrieve, store, and acquire knowledge. The mean of 3.2113 and standard deviation of 0.80906 implied the sugar firms had infrastructure for retrieving, storing, and acquiring knowledge; however, there were a few firms that had insufficient infrastructure. A large number of respondents (51.0%) were neutral on whether employees were well empowered to

improve creativity. Furthermore, a mean of 3.2526 and a standard deviation of 0.67764 showed that a slight increase in firm empowerment empowered employees to improve creativity, leading to the creation of new knowledge in the firm.

There were 72.2% of the respondents who agreed that knowledge was shared in the firm to enable high-skilled labor to be maintained. A mean of 3.7680 and a standard deviation of 0.72184 further agreed that knowledge sharing assisted the firm to maintain highly skilled labour across the sugar firms. Deng, Chao and Bai (2014) added that convergence of knowledge management assisted in sharing knowledge through resulting to trust-building collaboration, communication and building connectivity.

The results showed that 45.4% of respondents were neutral on whether the sugar industry rewards ideas and new knowledge creation to improve the firm's productivity. However, 42.3% of the sugar firms disagreed, compared to 12.4% who agreed that the firm rewarded creative ideas and new knowledge. The sample mean of 2.7010 and standard deviation of 0.67777 point out that the sugar industry did not reward new ideas and knowledge creation.

A response of 36.1% disagreed with the sugar firm in comparison with 21.6% who had a knowledge management system that stores and manages knowledge activities, even though 42.3% were neutral. A mean of 2.8557 and standard deviation of 0.74791 further revealed that few firms had knowledge management systems for storing and managing knowledge activities.

Half of the respondents were neutral on whether employees were provided with an appropriate source of knowledge that encouraged the acquisition of knowledge. However,

35.6% of respondents agreed and 14.4% disagreed, resulting in a mean of 3.2113 and a standard deviation of 0.67653. This reveals that knowledge sources were available to a few firms that assisted in knowledge acquisition.

Finally, the findings showed that 64.6% of respondents were neutral on whether the firms had improved or not the knowledge management capacity building through different knowledge activities. There were slightly more sugar companies with improved knowledge (30.4%) than those without (5.2%). The mean of 3.2526 and standard deviation of 0.54165 show that knowledge management capacity building was slightly practiced by sugar firms.

#### **4.5.3 Innovation Capacity Building**

The innovation capacity building strategy was examined using descriptive statistics in terms of percentage frequency, mean, and standard deviation.

**Table 4.10:**

*Innovation Capacity Building Descriptive Results*

Questions	5 (SA)	4 (A)	3 (N)	2 (D)	1 (SD)	Mean	STD
The firm has sufficient ICT resources that improve innovation in the firm.	15(7.7%)	114(58.8%)	43(22.2%)	22(11.3%)	0(0.0%)	3.6289	.78614
ICT innovations have been adopted to make work easy and efficient, reducing time wastage.	22(11.3%)	119(61.3%)	39(20.1%)	14(7.2%)	0(0.0%)	3.7617	.73964
The firm has adopted new process innovation that is economic to the firm.	16(8.2%)	74(38.1%)	65(33.5%)	39(20.1%)	0(0.0%)	3.3454	.89286
The procedure used from sourcing to manufacturing of sugar has been improved to facilitate high productivity.	22(11.3%)	80(41.2%)	60(30.9%)	32(16.5%)	0(0.0%)	3.4742	.90012
The sugar company has also improved the quality of the product through product innovations.	26(13.4%)	47(24.2%)	87(44.8%)	34(17.5%)	0(0.0%)	3.3351	.91962
There is improvement in product packaging to increase the productivity of the firm.	39(20.1%)	90(46.4%)	38(19.6%)	27(13.9%)	0(0.0%)	3.7268	.93996
The innovation capacity building is geared to improve creativity and enhance productivity in the firm.	19(9.8%)	81(41.8%)	74(38.1%)	20(10.3%)	0(0.0%)	3.5103	.80953

*Key: 1 = Strongly Disagree (DS), 2= Disagree (D), 3= Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA), STD = Standard Deviation.*

Table 4.10 results showed that 58.5% of the respondents agreed that there were sufficient ICT resources that improved innovation in the firm. With a mean result of 3.6289 and a standard deviation of 0.78614, the study finds that the firms had considerable ICT resources that were important in pushing the firm’s innovation. ,

Further examination of ICT innovations revealed that 61.3% of the firms had adopted ICT innovation to make work easy and efficient, reducing time wastage. A mean of 3.7617 and

standard deviation of 0.73964 revealed that the adoption of ICT innovation is homogenously adopted in the sugar firms to make work easier and eliminate time wastage. Mwawasi (2014) found that innovation through incorporating ICT facilities for training and learning process improved academic performance among the public secondary schools in Kenya. The current study pointed that ICT resources enabled high efficiency and reducing time wastage.

Process innovation was also examined, and the result pointed out that a majority of 38.1% of the respondents agreed that their firm had adopted new process innovation that was economically beneficial to the firm. The mean of 3.3454 and standard deviation of 0.89286 further reveal that not all firms have adopted new process innovation, but a slight majority have. A response of 41.2% agreed that the procedures used from sourcing to manufacturing of sugar had been improved to facilitate high productivity.

Its mean of 3.4742 and standard deviation of 0.90012 show that those who had adopted sourcing manufacturing procedures were slightly more than those who did not use them. This implies that a few sugar firms seem to be laggards in the adoption of process innovation and sourcing strategies, leading them to remain behind.

The findings revealed that a majority of the 44.8% of respondents were neutral about the sugar company improving the quality of the product through product innovations. Nevertheless, a mean of 3.3351 and a standard deviation of 0.91962 indicated that those firms that used production innovations were slightly more successful than those that did not. On the contrary, 46.4% of the firms agreed that they used product packaging to improve productivity.

The mean of 3.7268 and standard deviation of 0.93996 further revealed that the majority of the firms have improved product packaging as a method of improving productivity. This implies that product packaging was often used to improve productivity as compared to product innovation, which has enhanced productivity in sugar firms.

Finally, the results revealed that 41.8% of the respondents agreed that the innovation capacity building was geared to improve creativity and enhance productivity in the firm. A mean of 3.5103 and a standard deviation of 0.80953 revealed that innovation capacity buildings had slightly improved the creativity and enhanced productivity of the firms, despite some very few firms that had not applied innovation capacity building.

#### **4.5.4 Organizational Capacity Building**

The descriptive results for organizational capacity building in terms of percentage frequency, mean, and standard deviation were adopted. The results are presented in Table 4.11.

**Table 4.11:***Organizational Capacity Building Descriptive Results*

Questions	5 (SA)	4 (A)	3 (N)	2 (D)	1 (SD)	Mean	STD
The organization structure is more flexible in the decision-making process.	0(0.0%)	151(77.8%)	10(5.2%)	33(17.0%)	0(0.0%)	3.6082	.76255
We have enhanced and restructured the organization structure to ensure high efficiency.	32(16.5%)	54(27.8%)	83(42.8%)	25(12.9%)	0(0.0%)	3.4794	.91736
The organization has restructured the operation to a more flexible and efficient system.	24(12.4%)	106(54.6%)	46(23.7%)	18(9.3%)	0(0.0%)	3.7010	.80368
The organization system has been upgraded with modern technology for high efficiency	12(6.2%)	69(35.6%)	75(38.7%)	38(19.6%)	0(0.0%)	3.2835	.84989
We have implemented organisational strategies that will turn around the sugar firm.	12(6.2%)	116(59.8%)	23(11.9%)	43(22.2%)	0(0.0%)	3.5000	.90622
The organization achieves the set goals through improvement in operation tactics.	10(5.2%)	153(78.9%)	31(16.0%)	0(0.0%)	0(0.0%)	3.8918	.44795

*Key: 1 = Strongly Disagree (DS), 2= Disagree (D), 3= Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA), STD = Standard Deviation.*

The findings presented in Table 4.11 revealed that 77.8% of the organization structure was more flexible in the decision-making process as compared to 17.0%. A mean of 3.6082 and a standard deviation of 0.76255 showed the majority of the sugar firms had flexible organizational structures that enhanced the decision-making process. Consequently, 42.8% of the respondents were neutral about the fact that the firm had enhanced and restructured its organizational structure to ensure high efficiency. The mean of 3.4794 and standard deviation of 0.91736 show that there were slightly more firms that restructured and improved their organization structure as compared to those that did not.



There were 54.6% of the respondents who agreed that the organization had restructured the operation into a more flexible and efficient system. The mean of 3.7010 and standard deviation of 0.80368 showed that the firms operations were flexible and efficient in more sugar firms. It was also found that 38.7% of the respondents were neutral about the fact that the organization's system had been upgraded with modern technology for high efficiency. A mean of 3.2835 and a standard deviation of 0.84989 revealed that there were slightly more firms that upgraded their organizational systems as compared with those that did not. This improvement of the organization system was more of a restructuring operation than an upgrade of the existing system to modern technology.

In response to organizational strategies, 59.8% of the respondents had implemented organizational strategies that turned around the sugar firm. The mean of 3.5000 and standard deviation of 0.90622 show that there were considerably more firms that implemented organizational strategies that resulted in turnarounds as compared to those that did not. The adoption of turnaround strategies is a crucial aspect when the industry is facing a decline in production.

Further examination showed that 78.9% of the sugar firms agreed to achieve the set goals through improvement in operation tactics. The mean of 3.8918 and standard deviation of 0.44795 show that the use of operation tactics has enabled the organization to achieve the set goals. The sugar firms have used organizational strategies and operational tactics to achieve their set goals.

### 4.5.5 Transformational Leadership

Transformational leadership was assessed, and the descriptive statistics results were obtained from the questionnaire. This includes percentage frequencies, mean, and standard deviation, as revealed in Table 4.12.

**Table 4.12:**

*Transformational Leadership Descriptive Results*

Questions	5 (SA)	4 (A)	3 (N)	2 (D)	1 (SD)	Mean	STD
The firm has leaders who inspire employees to improve productivity.	33(17.0%)	112(57.7%)	49(25.3%)	0(0.0%)	0(0.0%)	3.9175	.64655
The manager and leader lead by example which has changed the working environment for employees.	55(28.4%)	84(43.3%)	34(17.5%)	21(10.8%)	0(0.0%)	3.8918	.94053
The management is creative resulting in new ideas for improving the productivity of the firm.	17(8.8%)	45(23.2%)	77(39.7%)	55(28.4%)	0(0.0%)	3.1237	.92471
New ideas and creativity within employees are incorporated into the firm building an innovation culture.	19(9.8%)	61(31.4%)	91(46.9%)	12(6.2%)	11(5.7%)	3.3351	.94189
The employees are well motivated by their leaders through financial and non-financial motivation.	12(6.2%)	80(41.2%)	75(38.7%)	27(13.9%)	0(0.0%)	3.3969	.80297
A transformative leader has improved the management of firm resources and human capital.	27(13.9%)	104(53.6%)	41(21.1%)	22(11.3%)	0(0.0%)	3.7010	.84761

*Key: 1 = Strongly Disagree (DS), 2= Disagree (D), 3= Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA), STD = Standard Deviation.*

According to the results in Table 4.12, the sugar firms had leaders who inspired employees to improve productivity, as revealed by 57.7% of the respondents. Subsequently, the study found that the inspiration of employees was achieved across the industry with low variation, as indicated by a mean of 3.9175 and a standard deviation of 0.64655. Further statistical findings revealed that managers and leaders led by example, which changed the working environment for employees since 43.3% agreed. The mean of 3.8918 and a standard deviation of 0.94053 showed that the work environment for employees was improved through management by example, which was achieved in the majority of the sugar firms.

According to the results, there were 39.7% constituting neutral respondents on whether the management was creative, resulting in new ideas for improving the productivity of the firm. However, the mean of 3.1237 and standard deviation of 0.92471 showed that there were slightly more sugar firms that utilized management creativity to improve productivity as opposed to those that did not. Similarly, new ideas and creativity within employees had 46.9% of the respondents who were neutral. The mean of 3.3351 and standard deviation of 0.94189 revealed that there were more firms that utilized new ideas and creativity to enhance the innovative culture among the sugar firms.

Further examination showed that 41.2% of the employees were motivated by their leaders through financial and non-financial motivations. The mean of 3.3969 and standard deviation of 0.80297 showed that employee motivation was practiced by slightly more firms than those that did not motivate their employees.

There were 53.6% of the respondents who agreed that a transformational leader would improve the management of firm resources and human capital. A mean of 3.7010 and a

standard deviation of 0.84761 revealed that the majority of the firms had transformational leaders who improved the management of firm resources and human capital.

#### 4.5.6 Productivity of Sugar Companies

The productivity of the sugar companies was examined, and the descriptive results, that is, percentage frequency, mean, and standard deviation, were adopted. The findings are presented in Table 4.13.

**Table 4.13:**

##### *Production of Sugar Companies Descriptive Results*

Questions	5 (SA)	4 (A)	3 (N)	2 (D)	1 (SD)	Mean	STD
The production of sugar has improved in terms of yields over years.	33(17.0%)	107(55.2%)	44(22.7%)	10(5.2%)	0(0.0%)	3.8402	.76194
Employee productivity in terms of yields per employee has increased in the firm.	0(0.0%)	115(59.3%)	48(24.7%)	31(16.0%)	0(0.0%)	3.4330	.75367
The sugar product quality has improved in the firm.	32(16.5%)	78(40.2%)	53(27.3%)	31(16.0%)	0(0.0%)	3.5722	.94811
There is improvement in variety of sugar products in the firms.	23(11.9%)	35(18.0%)	106(54.6%)	30(15.5%)	0(0.0%)	3.2629	.86256
The rate of production has improved due to the efficiency of the employees.	8(4.1%)	112(57.7%)	56(28.9%)	18(9.3%)	0(0.0%)	3.5670	.71848

*Key: 1 = Strongly Disagree (DS), 2= Disagree (D), 3= Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA), STD = Standard Deviation.*

The results in Table 4.13 revealed that the production of sugar has improved in terms of yields as compared with other years since 55.2% of respondents agreed. The mean of 3.8402

revealed that most of the sugar firms registered significant improvement in terms of yields as compared to those who did not, as shown further by the standard deviation of 0.76194. Similarly, 59.3% of respondents agreed that employee productivity in terms of yields per employee had increased as compared with other years. However, the mean of 3.4330 and standard deviation of 0.75367 revealed that firms that had improved in employee production were slightly higher than those that registered no improvement at all.

Findings further revealed that the quality of sugar had improved in the firms, as 40.2% of the respondents agreed. The mean results of 3.5722 with a standard deviation of 0.94811 showed a slightly higher variation among the firms on sugar product quality, where those who produced quality sugar were slightly higher as compared with those that retained or had poor quality.

Further analysis of sugar product varieties revealed that 54.6% of respondents were neutral. The mean of 3.2629 and standard deviation of 0.86256 further revealed that there were slightly more firms that had different varieties of sugar products as compared to those that produced one product. Concerning the rate of production, 57.7% of the firms improved due to the efficiency of their employees. However, there were a few firms that did not improve the efficiency of their employees, as indicated by a mean of 3.5670 and a standard deviation of 0.71848.

#### **4.6 Inferential Statistics**

The study adopted Pearson correlation to examine the interrelationship between variables. In order to examine the hypothesis, hierarchical linear regression modeling was adopted.

Both Pearson correlation coefficient and regression models were tested based on a 5% significance level.

#### 4.6.1 Correlation Analysis

The Pearson Correlation Coefficient (R) was adopted based on a 5% significance level. It tested the interrelationship between employee capacity building (ECB), knowledge management capacity building (KMCB), innovation capacity building (ICB), organizational capacity building (OCB), transformational leadership (TL), and organization productivity (OP). This was summarized in in Table 4.14.

**Table 4.14:**

*Correlation Matrix*

		<b>ECB</b>	<b>KMCB</b>	<b>ICB</b>	<b>OCB</b>	<b>TL</b>	<b>OP</b>
ECB	Pearson Correlation	1	.655**	.657**	.667**	.464**	.762**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	194	194	194	194	194	194
KMCB	Pearson Correlation		1	.652**	.688**	.578**	.843**
	Sig. (2-tailed)			.000	.000	.000	.000
	N		194	194	194	194	194
ICB	Pearson Correlation			1	.614**	.692**	.806**
	Sig. (2-tailed)				.000	.000	.000
	N			194	194	194	194
OCB	Pearson Correlation				1	.692**	.835**
	Sig. (2-tailed)					.000	.000
	N				194	194	194
TL	Pearson Correlation					1	.770**
	Sig. (2-tailed)						.000
	N					194	194
OP	Pearson Correlation						1
	Sig. (2-tailed)						
	N						194

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

*Key: ECB = Employee Capacity Building, KMCB= Knowledge Management Capacity Building, ICB= Innovation Capacity Building, OCB = Organizational Capacity Building, TL = Transformational Leadership, OP= Organizational Productivity.*

The results in Table 4.14 revealed that employee capacity building (ECB) had a moderate and significant correlation with knowledge management capacity building ( $R = 0.655$ ), innovation capacity building ( $R = 0.657$ ), organization capacity building ( $R = 0.667$ ), and transformational leadership ( $R = 0.464$ ). Knowledge management capacity building was moderate correlated with innovation capacity building ( $R = 0.652$ ), organization capacity building ( $R = 0.688$ ), and transformational leadership ( $R = 0.578$ ).

The results also showed that innovation capacity building had a moderate correlation with organization capacity building ( $R = 0.614$ ) and transformational leadership ( $R = 0.692$ ). Organizational capacity building had a moderate correlation with transformational leadership ( $0.692$ ).

Finally, organizational productivity was found to have a very high correlation with knowledge management capacity building ( $R = 0.843$ ), innovation capacity building ( $R = 0.806$ ), organizational capacity building ( $R = 0.835$ ), employee capacity building ( $R = 0.762$ ) and transformational leadership ( $R = 0.770$ ). Therefore, knowledge management capacity building, innovation capacity building, organizational capacity building and employee capacity building had positive and significant statistical relationship with organization performance.

#### **4.6.2 Test of Hypotheses**

The test of hypotheses was achieved using simple and multiple regression analysis. The first four hypotheses were tested using simple linear regression. Hierarchical multiple linear

regression models model were adopted for testing the fifth hypothesis that examined the moderating effect.

*H<sub>01</sub> There is no statistically significant relationship between employee capacity building and the productivity of sugar companies in Kenya.*

Employee capacity building was examined on productivity using a simple linear regression model. The regression model results were summarized into models summary which consist of r, r square and ANOVA statistics as shown in Table 4.15.

**Table 4.15:**

*Employee capacity building Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Sig. F Change	
					R Square Change	F Change	df1		df2
1	.762 <sup>a</sup>	.581	.579	.37577	.581	266.489	1	192	.000

a. Predictors: (Constant), ECB

Table 4.15 results revealed that there existed a significant strong positive relationship between employee capacity building and organizational productivity (R=0.762, P=0.000<0.05). The coefficient of determination indicated that 58.1% variation in employee capacity building was associated with human resource capacity while other factors were 41.9% (r-square = 0.581). This indicated that employee capacity building has a big role to play in enhancing productivity of the organization.



The coefficient table results of employee capacity building on organization productivity was presented in Table 4.16.

**Table 4.16:**

*Employee Capacity Building Coefficient Results*

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	-.986	.278		-3.543	.000
	ECB	1.198	.073	.762	16.324	.000

a. Dependent Variable: OP

According to Table 4.16 results, employee capacity building has a significant relationship with productivity ( $\beta_1 = 1.198$ ,  $P=0.000 < 0.05$ ). The results further reveal that a unit increase in employee capacity building had 1.198 units impact on organization productivity. Hence the results rejected the first null hypothesis so the alternative was adopted. Therefore, there was a statistically significant relationship between employee capacity building and the productivity of sugar companies in Kenya.

The results from the current study concur with Safkaur and Sagrim (2019) in a study done Indonesia and Sholesi (2021) in one done in Nigeria. However, the two studies focused on performance of the firms rather than productivity. The training programs that provide induction, on and off-the-job training played an important aspect in the productivity of the sugar firms.

*H<sub>02</sub> There is no statistically significant relationship between knowledge management capacity building and the productivity of sugar companies in Kenya.*

In order to examine the relationship between knowledge management capacity building and productivity of sugar companies in Kenya, a model summary and coefficient tablets were adopted. The results were tested using 5% significant level both for the ANOVA and statistics as presented on Table 4.17 and 4.18.

**Table 4.17:**

*Knowledge Management Capacity Building Summary Model*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.843 <sup>a</sup>	.711	.709	.31237	.711	471.503	1	192	.000

a. Predictors: (Constant), KMCB

According to the summary model results, knowledge management capacity building had strong positive significant relationship with organizational productivity (R=0.843, P=0.000<0.05). The contribution of knowledge management capacity building is 71.1% of total variation in productivity of the organization (r-square =0.711). On the contrary, 28.9% of the variation of productivity of the organization was associated with other factors. Therefore, organization should adopt knowledge management capacity building in order to hence there performance.

**Table 4.18:***Knowledge Management Capacity Building Coefficients*

Model		Unstandardized Coefficients		Standardized	T	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	-.224	.175		-1.281	.202
	KMCB	1.182	.054	.843	21.714	.000

a. Dependent Variable: OP

The second hypothesis was rejected on the basis that knowledge management capacity building had a significant positive relationship with productivity ( $\beta_2 = 1.182$ ,  $P = 0.000 < 0.05$ ). This implied that a unit increase in knowledge management capacity building had 1.182 unit increase in organizational productivity. The alternative hypothesis was accepted, which implied that there was a statistically significant relationship between knowledge management capacity building and the productivity of sugar companies in Kenya.

Similarly, knowledge management capacity had significant impact on performance of firms in Malaysia as found by Alaarj and Mohamed (2017). The study used partial least square which focused while the current study utilized ordinary least square to examined knowledge management capacity and productivity. The current study pointed out knowledge sharing as the leading variable on productivity of the firms.

The results also pointed out that the sugar firms had poor reward system for new knowledge and knowledge management system, despite, knowledge management practices being significant in productivity of sugar firms under investigation. The sugar firms should

improve in knowledge retrieve, store, and acquire, improve creativity and knowledge acquisition.

Knowledge management practices through capacity building culture enhanced employee performance as found by Patwary, et al. (2023). The results concur with current study that knowledge management capacity building had significant impact on productivity where employee productivity is one of the aspect of productivity.

*H<sub>03</sub> There is no statistically significant relationship between innovation capacity building and the productivity of sugar companies in Kenya.*

The innovation capacity building was examined using simple linear regression model to ascertain its individual relationship with productivity of sugar companies in Kenya. The results were presented in Table 4.19.

**Table 4.19:**

*Innovation Capacity Building Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.806 <sup>a</sup>	.649	.648	.34383	.649	355.627	1	192	.000

a. Predictors: (Constant), ICB

The summary results indicate that there was a strong significant relationship between innovation capacity building and productivity of sugar companies (R = 0.806,

P=0.000<0.05). The study results further indicated that 64.9% variation in organization productivity was associated with innovation capacity building (r-square = 0.649). Other factors contributed to the remaining 35.1% variation in organization productivity.

**Table 4.20:**

*Innovation Capacity Building Coefficient Results*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.690	.153		4.516	.000
	ICB	.804	.043	.806	18.858	.000

a. Dependent Variable: OP

According to Table 4.20 innovation capacity building had a positive significant relationship with organizational productivity ( $\beta_3 = 0.804$ ,  $P = 0.000 < 0.05$ ). Therefore, an increase in one unit of innovation capacity building had increase by 0.804 units on productivity in the organization.

The third hypothesis was rejected and the alternative accepted. Therefore, there was a statistically significant relationship between innovation capacity building and the productivity of sugar companies in Kenya.

Sözbilir (2018) found that innovation capacity had positive significant relationship with innovation performance while the current study focused on the effect of innovation capacity building on productivity of the firm. The current study found that innovation capacity building significant influence productivity of sugar companies.

*H<sub>04</sub> There is no statistically significant relationship between organizational capacity building and the productivity of sugar companies in Kenya.*

Organizational capacity building was examined in relation to productivity of the sugar companies in Kenya using simple linear regression. The summary model consisting of Pearson correlation statistics and ANOVA as well as coefficients Table.

**Table 4.21:**

*Organizational Capacity Building Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.835 <sup>a</sup>	.698	.696	.31919	.698	443.465	1	192	.000

a. Predictors: (Constant), OCB

Organizational capacity building had a strong positive significant relationship with organizational productivity (R=0.835, P=0.000<0.05). The results indicated that 69.8% variation in productivity of the organization was associated with organizational capacity building, however, other factors contributed 30.2% variation in the organization productivity (R-square = 0.698).

**Table 4.22:***Organization Capacity Building Coefficient Results*

Model		Unstandardized Coefficients		Standardized	T	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	.435	.149		2.922	.004
	OCB	.867	.041	.835	21.059	.000

a. Dependent Variable: OP

According to the results in Table 4.22 organization capacity building had positive significant relationship with organization productivity. The results also revealed that a unit increase in organization capacity building caused 0.867 increase in organization productivity. The fourth null hypothesis was rejected and an alternative was adopted ( $\beta_4 = 0.867$ ,  $P = 0.000 < 0.05$ ). This implies that there was a statistically significant relationship between organizational capacity building and the productivity of sugar companies in Kenya.

Hindasah and Nuryakin (2020) in a study of organizational capability and SMEs' financial performance in Korea found that organizational capacity had positive significant influence on financial performance. In the current study, results were similar to the above despite the other study focusing on financial performance rather than productivity of the firm.

*H<sub>05</sub>: Transformational leadership has no statistically significant moderating effect on the relationship between capacity building and productivity in sugar companies in Kenya.*

The regression modeling adopted was hierarchical, which entails two regression models. The first regression model was based on the linear relationship between capacity building indicators (employee capacity building, knowledge management capacity building, innovation capacity building, and organizational capacity building) and organizational productivity. The second model added the interactive variable between transformational leadership and elements of capacity building, which was used to test the moderating effect of transformational leadership on the relationship between capacity building and organizational productivity.

The first multiple regression model for capacity building and organizational productivity is presented in Table 4.23.

*Table 4.23:*

**Regression for Capacity Building and Organizational Productivity**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>	<b>Change Statistics</b>				
					<b>R Square Change</b>	<b>F Change</b>	<b>df1</b>	<b>df2</b>	<b>Sig. F Change</b>
1	.925 <sup>a</sup>	.856	.853	.22178	.856	281.816	4	189	.000

a. Predictors: (Constant), OCB, ECB, ICB, KMCB

*Key: ECB = Employee capacity building, KMCB= Knowledge Management Capacity Building, ICB= Innovation Capacity Building, OCB = Organizational Capacity Building, TL = Transformational Leadership, OP= Organizational Productivity.*



The results in Table 4.23 revealed that capacity building had a strong relationship with organizational productivity ( $R = 0.925$ ). A variation of 85.6% in organization productivity (OP) was determined by capacity building in terms of employee capacity building, knowledge management capacity building, innovation capacity building, and organizational capacity building, while other variables contributed 14.4% ( $R^2 = 0.856$ ). The results further showed that capacity building had a significant relationship with organizational productivity ( $F(4, 189) = 281.816, P = 0.000 < 0.05$ ).

Table 4.24:

Regression for Capacity Building and Organizational Productivity

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.814	0.165		-4.932	.000
	ECB	0.192	0.70	.122	2.754	.006
	KMCB	0.478	0.070	.341	6.838	.000
	ICB	0.200	0.046	.201	4.356	.000
	OCB	0.390	0.045	.376	8.734	.000

Further results indicated that employee capacity building had a positive and significant relationship with organization productivity ( $\beta_1 = 0.192, P = 0.000 < 0.05$ ). Similarly, Knowledge management capacity building significantly affected organization productivity ( $\beta_2 = 0.478, P = 0.000 < 0.05$ ).

Innovation capacity building also positively and significantly influenced organizational productivity ( $\beta_3 = 0.200$ ,  $P = 0.000 < 0.05$ ). Finally, the study showed that organizational capacity building had a significant positive effect on organizational productivity ( $\beta_4 = 0.390$ ,  $P = 0.000 < 0.05$ ).

In summary, the regression modeling can be presented as follows:

$$OP = -0.814 + 0.192 \text{ ECB} + 0.478 \text{ KMCB} + 0.200 \text{ ICB} + 0.390 \text{ OCB}$$

The model implies that a unit increase in employee capacity building (ECB), knowledge management capacity building (KMCB), innovation capacity building (ICB), and organizational capacity building (OCB) leads to a 19.2%, 47.8%, 20%, and 39% increase in organization productivity (OP).

The second regression model represented the moderating effect of transformational leadership on the relationship between capacity building and organizational productivity. The results are presented in Table 4.25.

**Table 4.25:**

*Direct and Moderated Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.925 <sup>a</sup>	.856	.853	.22178	.856	281.816	4	189	.000
2	.950 <sup>b</sup>	.902	.898	.18510	.046	21.583	4	185	.000

a. Predictors: (Constant), OCB, ECB, ICB, KMCB  
b. Predictors: (Constant), OCB, ECB, ICB, KMCB, ECB\_TL, ICB\_TL, OCB\_TL, KMCB\_TL

According to the results, capacity building – that is, employee capacity building, knowledge management capacity building, innovation capacity building, and organization capacity building – and its interaction with transformation leadership had a very strong positive effect on organizational productivity ( $R = 0.950$ ).

This resulted in a 90.2% variation in organization productivity, while other variables contributed 9.8% ( $R^2 = 0.902$ ). The findings further revealed that 4.6% of the variation in organization productivity was contributed by the moderating effect of transformational leadership on the relationship between capacity building and organization productivity ( $R^2$  Change = 0.046) after increasing the  $R^2$  from 0.856 to 0.902.

The results further indicated that transformational leadership significantly moderated the relationship between capacity building and organization productivity (Sig. F Change =  $0.000 < 0.05$ ). The modeling of the moderating effect of transformational leadership on the relationship between capacity building and organization productivity was also found to be significant ( $F = 213.081$ ,  $P = 0.00 < 0.05$ ).

**Table 4.26:***Regression for Moderating Effect*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.230	.186		1.235	.218
	ECB	1.423	.224	.906	6.357	.000
	KMCB	1.568	.365	1.118	4.292	.000
	ICB	.340	.244	.341	1.394	.049
	OCB	.974	.262	.939	3.716	.000
	ECB_TL	.339	.064	1.965	5.292	.000
	KMCB_TL	.552	.100	3.164	5.514	.000
	ICB_TL	.139	.070	.997	1.987	.048
	OCB_TL	.222	.078	1.558	2.842	.005

a. Dependent Variable: Organizational Productivity

*Key: ECB = Employee capacity building, KMCB= Knowledge Management Capacity Building, ICB= Innovation Capacity Building, OCB = Organizational Capacity Building, TL = Transformational Leadership, OP= Organizational Productivity, ECB\_TL = Interaction of Employee capacity building and Transformational Leadership, KMCB\_TL = Interaction of Knowledge Management Capacity Building and Transformational Leadership, ICB\_TL = Interaction of Innovation Capacity Building and Transformational Leadership and OCB\_TL = Interaction of Organizational Capacity Building and Transformational Leadership.*

This can be summarized in the following model:

$$OP = 1.423 \text{ ECB} + 1.568 \text{ KMCB} + 0.340 \text{ ICB} + 0.974 \text{ OCB} + 0.339 \text{ ECB\_TL} + 0.552 \text{ KMCB\_TL} + 0.139 \text{ ICB\_TL} + 0.222 \text{ OCB\_TL}.$$

Further analysis showed that transformation leadership had a significant positive moderating effect on the relationship between employee capacity building and organization productivity ( $\beta_5 = 0.339$ ,  $P = 0.000 < 0.05$ ). Similarly transformation leadership had a positive moderating effect on the relationship between knowledge management and transformative leadership ( $\beta_6 = 0.552$ ,  $P = 0.000 < 0.05$ ). The study also revealed that transformational leadership had a positive moderating effect on innovation capacity building and organization productivity ( $\beta_7 = 0.139$ ,  $P = 0.000 < 0.05$ ). Finally, transformational leadership had a significant positive moderating effect on organizational capacity building and organizational productivity.

Finally, the fifth hypothesis was rejected and the alternative accepted (Sig. F Change =  $0.000 < 0.05$ ). Therefore, transformational leadership had a statistically significant moderating effect on the relationship between capacity building and productivity in sugar companies in Kenya. Transformational leadership had a moderating effect on the relationship between employee capacity building and organizational productivity, the relationship between knowledge management capacity building and organizational productivity, the relationship between innovation capacity building and organizational productivity, as well as the relationship between organizational capacity building and organizational productivity.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The section provides a summary, conclusions, and recommendations of the study. A summary per objective was made, which assisted in developing conclusions and recommendations. Similarly, conclusions and recommendations were made in relation to the objectives.

#### **5.2 Summary**

The summary of results is presented as follows in terms of objectives:

##### **5.2.1 Employee capacity building and Organization Productivity**

The results revealed that the sugar firms had used team building to ensure a cohesive workforce. Besides team building, the study conducted on-and-off-the-job training to enhance employee capacity building, which resulted in higher organizational productivity. Similarly, new employees were inducted to improve their productivity.

Employees were also motivated, which assisted in enhancing employee productivity. However, there were few periodic reviews of employee motivation, which affected productivity. The study also found that employee retention moderately enhanced capacity building, leading to high production. The results showed that employee capacity development led to improved productivity in the sugar companies.

The null hypothesis was rejected since the study found a statistically significant positive relationship between employee capacity building and organizational productivity ( $P < 0.05$ ).

### **5.2.2 Knowledge Management Capacity Building and Organization Productivity**

According to the results, a few firms had developed sufficient infrastructure for retrieving, storing, and acquiring knowledge. The results revealed that more than half of the sugar firms empowered their employees to be creative, leading to the creation of new knowledge. Knowledge sharing in the majority of the firms contributed to high skills in the labor force.

On the contrary, the majority of the sugar firms did not reward new ideas and knowledge, which negatively affected knowledge creation. Similarly, these firms did not invest in a knowledge management system that could store and manage knowledge activities. This implies that the sugar firms need to improve their reward systems as well as their knowledge management systems to manage and utilize existing knowledge for higher productivity.

In more than half the firms, the employees were provided with appropriate sources of knowledge that improved knowledge acquisition. These firms had improved knowledge management capacity through different knowledge activities. Knowledge management capacity building is not well developed in the sugar industry, resulting in poor acquisition and storage, although the employees have tried to share existing knowledge.

The null hypothesis was then rejected and an alternative hypothesis adopted ( $P < 0.05$ ). Therefore, there was a statistically significant relationship between knowledge management capacity building and organizational productivity.

### **5.2.3 Innovation Capacity Building and Organization Productivity**

The study results revealed ICT innovations and resources were sufficient in most of the firms, which assisted in making work easy and efficient and reducing wastage of time. The efficiency and ease of working were attributed to advancements in ICT resources and innovations.

On the contrary, there were slightly more firms that adopted new process innovations that led to higher benefits than costs. Similarly, the procedures used from sourcing to manufacturing of sugar had improved in some of the firms, which improved the facilitation of raw materials for high productivity.

The sugar firms also had slightly more firms that had improved the quality of their product through product innovation as compared to those who did not. Those firms that improved process innovation and product innovation had enhanced productivity.

There was an improvement in product packaging, which increased the productivity of the sugar firms. Therefore, building innovation capacity improved the creativity and productivity of the organizations. The results further revealed that there was a statistically significant relationship between innovation capacity building and organizational productivity in the sugar companies in Kenya ( $P < 0.05$ ).



#### **5.2.4 Organizational Capacity Building and Organization Productivity**

The organizational structure was flexible in most of the firms, which enabled ease in the decision-making process. There were slightly fewer firms that restructured the organizational structure to ensure high efficiency.

This implies that there was more opportunity for restructuring the organization structure for more efficiency in the sugar industry. The organizations did restructure their operations to ensure flexibility and efficiency. Findings indicated that organizational systems were slightly upgraded with modern technology to enable higher efficiency. The study also explained organizational strategies that have helped the industry turn around the sugar firm. Nevertheless, the sugar industry needs to improve its organization system to update technology as well as its organizational strategies to improve productivity.

The results showed that the organization achieved its set goals using operational tactics. The study found that organizational capacity building had a statistically significant relationship with organizational productivity ( $P < 0.05$ ).

#### **5.2.5 Moderating Effect of Transformation Leadership on Capacity Building and Organization Productivity**

The study results indicated that transformational leadership had a moderating effect on the relationship between capacity building and organization productivity (Sig. F Change =  $0.000 < 0.05$ ). Therefore, the null hypothesis was rejected and the alternative accepted.

Transformation leadership moderated first employee capacity building and organization productivity, second knowledge management capacity building and organization productivity, third innovation capacity building and organization productivity, and finally organizational capacity building and organization productivity.

### **5.3 Conclusions**

In the first objective, the study concluded that employee capacity building had a positive statistically significant relationship with the productivity of sugar companies in Kenya. The sugar firms conducted on-and-off-the-job training, which boosted employee capacity building and led to high production. In addition, new employees were inducted to improve productivity in the sugar industry. The sugar firms also motivated employees to enhance productivity. However, there were no frequent periodic reviews of the motivation structure, affecting the negative motivation system. The use of employee retention tactics enabled the firms to improve employee capacity building, leading to high productivity.

The study concluded that knowledge management capacity building had a positive and significant relationship with productivity of sugar firms in Kenya. Knowledge sharing was rated the highest knowledge management capacity-building practice. Slightly more firms had developed infrastructure for knowledge management that could store, retrieve, and acquire knowledge than those who did not. The employees were empowered to improve on existing creativity as well as provided with appropriate sources of knowledge. However, the sugar industry had challenges with its knowledge management system and a poor reward system that would enable the creation of new knowledge.

The study concluded in the third objective that innovation capacity building and productivity had a positive statistically significant relationship with organizational productivity. ICT resources and innovation were utilized by the majority of the sugar firms, but not extensively. The sugar industry had also improved product packaging as a means of increasing production. However, there was a need to further enhance product and process innovation.

The study further concluded that there was a statistically significant positive relationship between organizational capacity building and organizational productivity. This was associated with the flexibility of the organization's structure and the restructuring of operations. The organization's tactics also significantly contributed to organizational capacity building through appropriate organizational strategies. However, there is a need to restructure the organization's structure and systems so that they improve the overall efficiency of the sugar companies.

The study concluded that transformative leadership significantly moderated the relationship between capacity building and organizational productivity. Transformational leadership is crucial in ensuring that capacity building results in an improvement in organizational productivity. A transformational leader was enhanced through the ability to inspire, lead by example, and manage the firm's resources and human capital. However, creativity and new ideas from the leadership and employees were low among the sugar firms.

#### **5.4 Recommendations**

The current study recommends that firms improve human capacity building by reviewing the motivation system that leads to good productivity. The improvement of the motivation

system will not only assist in improving the efficiency of human resources but also assist in employee retention in the sugar industry.

Secondly, the study recommends that there is a need to improve the knowledge management system and policies. The knowledge management policies will enable the sugar industry to develop a rewarding system for knowledge and innovation creation.

Additionally, knowledge management system was found to enable the organization to create, acquire, and retrieve knowledge effectively and efficiently, knowledge management has the highest impact on productivity.

Thirdly, the study recommends improvement in product innovation and process innovation, which will create a competitive advantage and higher productivity in the sugar industry. The industry shows low improvement in product design and procedures used in sourcing, as well as process innovation.

The fourth recommendation is to enhance the organization's structure and systems through continuous restructuring to enable flexibility in the firm. The review, especially of the organization's system, involves adopting the latest technology.

The study recommends that the sugar industry improve on innovation through the acquisition of innovative leaders. This will enable the sugar industry to not only adopt process and product innovation but also develop an innovative culture. This will help the sugar companies compete well with the imported sugar and improve production.

## **5.5 Suggestions for Further Studies**

The study recommends further studies be done on knowledge management since it had the highest impact on productivity despite being underutilized across the sugar industry. Knowledge management concepts, that is, knowledge acquisition, creation, and sharing, were not fully examined in this study, which leaves the door for further interrogation.

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## APPENDICIES

### Appendix I: Letter of Introduction

Philip Keter,

University of Kabianga

P.O BOX 2030-20200

Kericho

Dear Sir/ Madam,

#### **RE: REQUEST FOR DATA COLLECTION.**

I am a student at the University of Kabianga currently doing a PhD in Business Management. Academic research is required as part of the requirements for conferring the said degree. My research topic is: *Capacity Building, Transformational Leadership and Productivity of Sugar Companies in Kenya*. You have been selected to be part of my respondents by filling out the attached questionnaire with relevant information. While carrying out this exercise, you are not supposed to disclose your identity. In addition, all the provided information will be used for academic purposes only. Thus, the information will be treated as private and confidential. Please read the attached questionnaire carefully and give your honest opinion by ticking in the space provided for each question. Thank you in advance.

Faithfully,

Philip Keter

## Appendix II: Questionnaire

The questionnaire aims to collect data specifically meant for academics only. The study seeks to assess the moderating effect of management style on the relationship between capacity building on the productivity of the sugar industry in Kenya. The data collected will not be shared with any institution or person because the data is being treated as private and confidential. Please fill all the questions in the blank spaces or by ticking on the options provided.

### SECTION A: DEMOGRAPHIC INFORMATION

1. What is the name of your company? (optional)

.....  
.....

2. For how long have you worked in the sugar industry?

.....  
.....

### SECTION B: EMPLOYEE CAPACITY BUILDING

The statements below seek to collect information on employee capacity building and productivity of sugar companies. On a scale of 1-5 tick the appropriate option according to the level depending on whether you strongly agree, agree, neutral disagree or strongly disagree on employee capacity development. Where 1 is for **Strongly Disagree (SA)**, 2 is **Disagree (A)**, 3 is **Neutral (N)**, 4 is **Agree (A)**, and lastly, 5 is **Strongly Agree (SA)**.

	<b>Statement</b>	<b>5 (SA)</b>	<b>4 (A)</b>	<b>3 (N)</b>	<b>2 (D)</b>	<b>1 (SD)</b>
3.	The sugar firm has used team-building activities to ensure a cohesive workforce.					
4.	The firm conducts on-and-off-the-job training to enhance employee capacity building resulting in high organisational productivity					
5.	New employees are provided with induction programmes that enhance their productivity.					
6.	We motivate employees, hence leading to improved productivity.					
7.	There are frequent periodic reviews on employees for motivating employees which enhances good productivity.					
8.	Employee retention enhances capacity building leading to high productivity.					
9.	Employee capacity development has led to improved productivity for the sugar company.					



## SECTION C: KNOWLEDGE MANAGEMENT CAPACITY BUILDING

The statements below seek to collect information on the knowledge management capacity building and productivity of sugar companies. On a scale of 1-5 tick the appropriate option according to the level you strongly agree, agree, neutral disagree or strongly disagree on organization development. Where 1 is for **Strongly Disagree (SA)**, 2 is **Disagree (A)**, 3 is **Neutral (N)**, 4 is **Agree (A)**, and lastly, 5 is **Strongly Agree (SA)**.

	<b>Statement</b>	<b>5 (SA)</b>	<b>4 (A)</b>	<b>3 (N)</b>	<b>2 (D)</b>	<b>1 (SD)</b>
10.	The firms have developed sufficient infrastructure that can retrieve, store and acquire knowledge.					
11.	The employees are well empowered to improve creativity leading to the creation of new knowledge in the firm.					
12.	Knowledge is shared in the firm to enable high skills labour to be maintained.					
13.	The sugar industry rewards ideas and new knowledge creation to improve the firm's productivity.					
14.	The firm has a knowledge management system that stores and manages knowledge activities.					
15.	Employees are provided with an					

	<b>Statement</b>	<b>5 (SA)</b>	<b>4 (A)</b>	<b>3 (N)</b>	<b>2 (D)</b>	<b>1 (SD)</b>
	appropriate source of knowledge that encourages the acquisition of knowledge.					
16.	The firm has improved knowledge management capacity building through different knowledge activities.					

#### **SECTION D: INNOVATION CAPACITY BUILDING**

The statements below seek to collect information on the innovation capacity building and productivity of sugar companies. On a scale of 1-5 tick the appropriate option according to the level you strongly agree, agree, neutral disagree or strongly disagree on organization development. Where 1 is for **Strongly Disagree (SA)**, 2 is **Disagree (A)**, 3 is **Neutral (N)**, 4 is **Agree (A)**, and lastly, 5 is **Strongly Agree (SA)**.

	<b>Statement</b>	<b>5 (SA)</b>	<b>4 (A)</b>	<b>3 (N)</b>	<b>2 (D)</b>	<b>1 (SD)</b>
17.	The firm has sufficient ICT resources that improve innovation in the firm.					
18.	ICT innovations have been adopted to make work easy and efficient reducing time wastage.					
19.	The firm has adopted new					

	<b>Statement</b>	<b>5 (SA)</b>	<b>4 (A)</b>	<b>3 (N)</b>	<b>2 (D)</b>	<b>1 (SD)</b>
	process innovation that is economic to the firm.					
20.	The procedure used from sourcing to manufacturing of sugar has been improved to facilitate high productivity.					
21.	The sugar company has also improved the quality of the product through product innovations.					
22.	There is improvement in product packaging to increase the productivity of the firm.					
23.	The innovation capacity buildings is geared to improve creativity and enhance productivity in the firm.					

## **SECTION E: ORGANIZATIONAL CAPACITY BUILDING**

The statements below seek to collect information on the organizational capacity building and productivity of sugar companies. On a scale of 1-5 tick the appropriate option according to the level you strongly agree, agree, neutral, disagree or strongly disagree on organizational

resources development. Where 1 is for **Strongly Disagree (SA)**, 2 is **Disagree (A)**, 3 is **Neutral (N)**, 4 is **Agree (A)**, and lastly, 5 is **Strongly Agree (SA)**.

	<b>Statement</b>	<b>5 (SA)</b>	<b>4 (A)</b>	<b>3 (N)</b>	<b>2 (D)</b>	<b>1 (SD)</b>
24.	The organization structure is more flexible in the decision-making process.					
25.	We have enhanced and restructured the organization structure to ensure high efficiency.					
26.	The organization has restructured the operation to a more flexible and efficient system.					
27.	The organization system has been upgraded with modern technology for high efficiency					
28.	We have implemented organisational strategies that will turn around the sugar firm.					
29.	The organization achieves the set goals through improvement in operation tactics.					

## SECTION F: TRANSFORMATIONAL LEADERSHIP

The statements below seek to collect information on transformational leadership. On a scale of 1-5 tick the appropriate option according to the level you strongly agree, agree, neutral, disagree or strongly disagree on organizational resources development. Where 1 is for **Strongly Disagree (SA)**, 2 is **Disagree (A)**, 3 is **Neutral (N)**, 4 is **Agree (A)**, and lastly, 5 is **Strongly Agree (SA)**.

	<b>Statement</b>	<b>5 (SA)</b>	<b>4 (A)</b>	<b>3 (N)</b>	<b>2 (D)</b>	<b>1 (SD)</b>
30.	The firm has leaders who inspire employees to improve productivity.					
31.	The manager and leader lead by example which has changed the working environment for employees.					
32.	The management is creative resulting in new ideas for improving the productivity of the firm.					
33.	New ideas and creativity from employees are incorporated into the firm building an innovation culture.					
34.	Employees are well motivated by their leaders through financial and non-financial motivation.					

	<b>Statement</b>	<b>5 (SA)</b>	<b>4 (A)</b>	<b>3 (N)</b>	<b>2 (D)</b>	<b>1 (SD)</b>
35.	A transformative leader has improved the management of firm resources and human capital.					

### **SECTION G: PRODUCTIVITY OF SUGAR COMPANY**

The statements below seek to collect information on the productivity of sugar companies. On a scale of 1-5 tick the appropriate option according to the level you strongly agree, agree, neutral, disagree or strongly disagree on productivity. Where 1 is for **Strongly Disagree (SA)**, 2 is **Disagree (A)**, 3 is **Neutral (N)**, 4 is **Agree (A)**, and lastly, 5 is **Strongly Agree (SA)**.

	<b>Statement</b>	<b>5 (SA)</b>	<b>4 (A)</b>	<b>3 (N)</b>	<b>2 (D)</b>	<b>1 (SD)</b>
36.	The production of sugar has improved in terms of yields as compared with other years.					
37.	Employee productivity in terms of yields per employee has increased as compared with other years.					

	<b>Statement</b>	<b>5 (SA)</b>	<b>4 (A)</b>	<b>3 (N)</b>	<b>2 (D)</b>	<b>1 (SD)</b>
38.	The sugar product quality has improved in the firm.					
39.	There is variety of sugar products as compared with other years.					
40.	The rate of production has improved due to the efficiency of employees.					

### **Appendix III: List of sugar companies in Kenya**

#### **Public Sugar Companies (Government owned)**

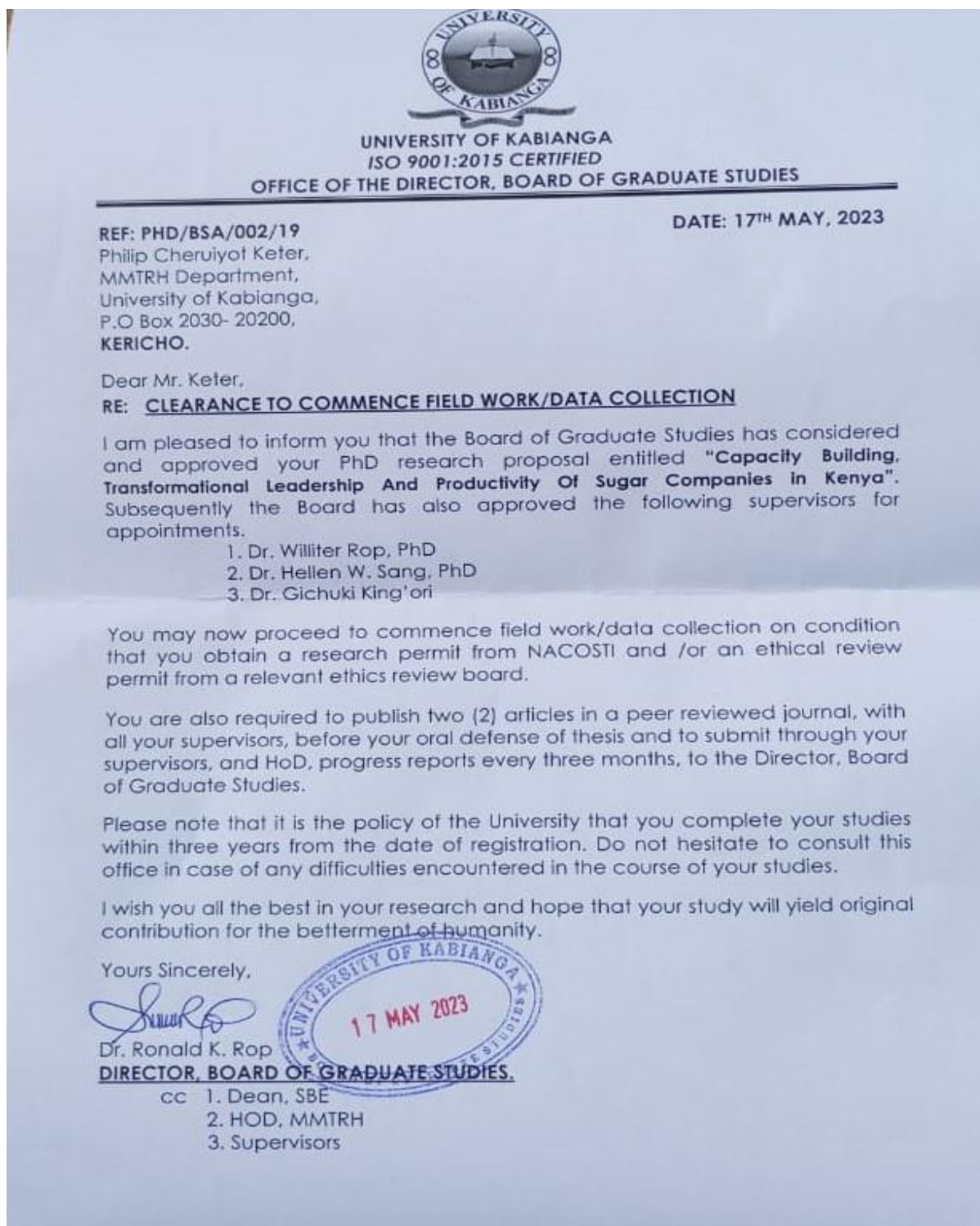
1. South Nyanza Sugar Company
2. Mumia Sugar Company
3. Chemelil Sugar Company
4. Nzoia Sugar Company
5. Muhoroni Sugar Company

#### **Private Sugar Companies (Non-Government Owned)**


6. West Kenya Sugar Company
7. Sony Sugar Company
8. Kibos Sugar and Allied Industries Limited
9. Butali Sugar Mills
10. Transmara Sugar Company
11. Sukari Industries Limited
12. Kwale International Sugar Company Limited
13. Kisii Sugar Factory




## Appendix IV: University Clearance Letter




Appendix V: NACOSTI Letter

  
REPUBLIC OF KENYA

  
NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 364816 Date of Issue: 31/May/2023

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## Appendix VI: Plagiarism Report

### Final Thesis

#### ORIGINALITY REPORT

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