

**INFLUENCE OF BALANCED SCORE CARD ON PERFORMANCE OF DAIRY
FIRMS IN KIAMBU COUNTY -KENYA**

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MASTER'S IN BUSINESS ADMINISTRATION-STRATEGIC MANAGEMENT
AT KENYA METHODIST UNIVERSITY.**

AUGUST 2025

DECLARATION

I declare that this research thesis is my own work and has not been submitted for any degree or examination in any other University.

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DEDICATION

I would like to dedicate this thesis to Robert Anachoni and Peter Nyakongo. Their unwavering support, encouragement, and guidance throughout this journey have been invaluable. Their belief in my abilities and constant motivation have been instrumental in my success. I am forever grateful for their presence in my life and for the sacrifices they have made to help me achieve my goals. This thesis is a testament to their unwavering love and support. Thank you for everything.

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ABSTRACT

The aim of the study was to explore the influence of selected balanced scorecard perspectives (customer, internal business process, financial and innovation and learning perspectives) on the performance of dairy firms in Kiambu County, Kenya. Performance of dairy firms is measured by growth and profitability if vital in creating economic opportunities for farmers and economic growth. Traditionally, financial performance measures have been applied in determining the performance of firms. The financial measurement system is inadequate since it fails to provide a comprehensive and holistic view of an organization's performance, leading to the development and use of a balanced scorecard that also paid attention to the nonfinancial strategic objectives. The objectives for the study were to assess the influence of customer satisfaction, innovation, financial and internal business process on the performance of dairy firms in Kiambu County. From the reviewed literature, the application of balanced scorecard is the formulation of strategic objectives and as a performance measure system has been linked to positive organization performance. However, gaps in methodology and insufficient empirical studies on application of balanced scorecard in the dairy firms were established, hence, the justification of this study. This study applied balanced scorecard theory, technology adoption theory, resource-based theory, and value-percept disparity theory. The researcher used a descriptive research design, a quantitative research method, and conducted correlation and regression analysis. The target population were 11 dairy firms in Kiambu County where a sample of 84 managers were obtained through simple random sampling techniques. The regression findings established a strong and positive correlation between balance scorecard perspectives and dairy firms' performance. A strong and positive correlation between innovation and learning perspectives and performance was established. Findings were similar for customer perspectives, internal business processes, and financial perspectives, indicating how the implementation of the strategic objectives of each of the balanced scorecard perspectives contributes to the general performance of the dairy firms in Kiambu county. Proposed recommendations included more investments in emerging and relevant technologies, diversification of dairy products and market expansion, and better debt management. Future researchers should improve the study through a representative sample by focusing on more industries.

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Abbreviations and Acronyms

AIS	Accounting Information Systems
BSC	Balanced Scorecard
BPER	Business Process Performance
CSR	Customer Social Responsibility
CFM	Customer Feedback Management
CSR	Cooperate Social Responsibility
DOI	Digital object identifier.
DJ	Distributive Justice
EAC	East African Community
EO	Entrepreneurial Exposure
GDP	Gross Domestic Product
GSE	General Self-efficacy
IC	Invention Capability
KDB	Kenya Dairy Board
MNE	Multinational Enterprise
NACOSTI	National Commission for Science, Technology and Innovation
PLS-SEM	Partial Least Squares Structural Equation Modelling
SPSS	Statistical package for social sciences

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The background of the study section provided the historical development of the topic and determined the existing gaps informing the current study. A global, regional, and local perspective of the research topic was analyzed as follows:

1.1.1 Global Perspective

Firm performance is fundamental since it guarantees growth, expansion, and value for stakeholders (Okorie, 2021; Rapitasari et al., 2021). According to Okorie (2021), firm performance is measured through efficient application of resources, customer satisfaction, cost reduction, and generally a growth in financial performance. A balanced scorecard has been conceptualized as an alternative performance measurement system that gives top management a fast and comprehensive view of the business performance (Gupta & Chopra, 2020; Okorie, 2021;). The development and application of the selected balance scorecard perspectives is attributed to Kaplan and Norton (2014), who advocated for a paradigm shift from the traditional performance measurement system, which was basically financial-centered, to a more holistic one, with the focus being nonfinancial perspectives as well (Rapitasari et al., 2021). The sole focus on finance as the core measure of organization's performance has been found to be deficient and unreliable (Karisa & Wainaina, 2020; Rapitasari et al., 2018). According to Kaplan and Norton (2014), financial performance can give a misleading perspective of the company's perspective

causing the top management fail to focus on strategic goals such as continuous improvement, customer satisfaction, and innovation that play a significant role in fostering a firm's competitive edge (Rapitasari et al., 2021). To overcome the challenges of the traditional performance measures and help managers to make better and informed performance-centered decisions, Kaplan and Norton (2014) developed the balanced score card with four main performance measures (Rapitasari et al., 2021), financial perspective, customer perspective, internal business processes perspective, and innovation and learning perspective. Thus, according to Kaplan and Norton (2014) the operational measures of firm's performance to be applied together with the financial measure to give a comprehensive view of the general organizational performance.

Globally, the dairy business makes a substantial contribution to each nation's economic development. Nowadays, most businesses in Vietnam assess their financial performance solely based on economic factors (Rapitasari et al., 2021). Employing these standards will prevent businesses from evaluating their internal strengths, which can assist them in identifying operational issues with their company or its prospects for future growth. However, performance indicators do not accurately reflect business plans because they don't show departmental links toward shared objectives. Even with the growing focus on BSC, numerous recent publications published in management accounting journals have emphasized the need for additional research on the application and significance of BSC. Furthermore, management accounting research has extensively used a contingency theory framework; nevertheless, until now, this line of inquiry has examined chiefly the effects of a small number of contingent factors connected to BSC. The impact of many dependent

variables on the design and application of BSC is thus the subject of multiple scholars' suggestions for further study. These recommendations offered additional perspectives for researching BSC.

Ten case studies involving owner-operators of dairy farms in New Zealand's lower North Island were conducted as part of research to apply the Balanced Scorecard to farming. Implementing the selected Balanced Scorecard perspectives may be hindered by the extent of on-farm analysis, which was another barrier. Farmers assessed businesses at a low level (Al-Dweikat & Nour, 2020). Budgets, productivity tracking, pasture monitoring, and bookkeeping were common techniques used in farm business analysis. Even though they were created, budgets were hardly ever used in tandem with cash flow management.

The importance of the consumer/customer in farm business decision-making must be balanced in Australia and New Zealand. Similarly, the growth and importance of supplier relationships are frequently overlooked. Initiatives to enhance the supplier-customer relationship for the benefit of all parties include contractual agreements, strategic alliances, and on-farm quality assurance systems (Maheshwari et al., 2020). Most farm business strategies handled the internal business aspect sufficiently. Regarding this part of their farm business, the farmers felt most at ease in this case. Another area for improvement in these farmers' plans was that they did not include longer-term output planning.

1.1.2 Regional perspective

East Africa has significantly less regional dairy trade than the world. Although it makes up less than 1% of the milk produced in the area, its recent sharp rise is encouraging. The average annual quantity of intra-regional dairy commerce for the 2010–13 period exceeded ten times that for the 2002–05 period (Tibbs & Langat, 2021). This incredible rise was made possible by the East African Community's (EAC) trade institutions and policy framework, such as the EAC Single Customs Territory, being strengthened and by the exceptional efforts made to harmonize regional standards for dairy products. Public and commercial entities provided significant funding to build and restore national cow stocks, infrastructure for collecting milk, and processing facilities in Rwanda and Uganda, in addition to advancements in policy and regulation.

Dairy items that can be exported from milk, produced by industry. Current trends in the dairy markets of the EU and the US present investment prospects as top dairy companies in these regions look for overseas commercial options. But if the EAC nations can successfully negotiate investment agreements with big, influential companies, they will be in a better position to benefit from these developments. Adopting a regional investment strategy and negotiating investment accords as a "regional block" will provide the EAC members with more negotiating leverage (Tibbs & Langat, 2021). Foreign investments could be very effective vehicles for developing dairy processing skills in the region, but only if they are strategically targeted.

Although traditional financial metrics are vital, they do not provide a comprehensive evaluation of a firm's overall health and success. Consequently, the concept of the

balanced scorecard has gained significance as a strategic management tool that goes beyond financial indicators. Additionally, it incorporates non-financial perspectives to offer a more universal view of organizational performance. In most parts of Kenya, more so Kiambu County, the dairy industry is one of primary economic activities that contribute significantly to both the GDP and employment. The demand for dairy products, including yogurt, cheese, and milk, has been on rise in the recent past, encouraging dairy firms to adopt innovative strategies for sustainable growth. As a result, it is essential to investigate the influence of Balanced Scorecard perspective on the performance of certified firms, specifically focusing on dairy firms in Kiambu County. According to Karisa and Wainaina (2020), the Balanced Scorecard is a strategic performance management framework essential in enabling organizations to translate their vision and mission into measures and objectives across four key perspectives, including learning and growth, internal, customer, and financial business processes. The perspectives in question collectively offer a balanced view of an organization's performance. Also, they emphasize the interconnectedness of multiple facets that contribute to its success.

1.1.3 Local perspective

Most of the Kenya's milk production is produced by small-scale farmers, who account for about 80% of the country's milk output, according to the Kenya Dairy Board, which estimated the country's milk production at 4 billion liters in 2009 (Maheshwari, 2020). Local grazing in the fields, nutritional supplements and feeds, and stall-fed cut-and-carry systems are some of the techniques used by small-scale farmers. Breeds of hybrids receive care. Production methods are influenced by the local climate, productivity of the land, and

presence of illnesses. Dairy farming was made possible locally by complex policies, hierarchical systems built by succeeding governments, the presence of dairy breeds, a climate conducive to dairy production, and the custom of raising cattle.

In the food firms, more so in the dairy sector, the financial perspective is essential in assessing the shareholder value, cost efficiency, and profitability of the company. Customer prospects are also vital as consumer satisfaction and preferences significantly determine the success of the company. Therefore, meeting and understanding consumer needs in Kiambu County, either through effective marketing, quality assurance, or product innovation, are vital fundamentals for dairy firms that are working towards attaining sustained growth. Additionally, internal business processes within certified dairy firms ensure operational effectiveness and efficiency. These processes include maintaining a competitive edge in the market, optimizing quality control measures, supply chain management, and production processes.

Conversely, the learning and growth perspective focuses on organization culture, human capital, and technology. Unquestionably, promoting a learning culture, technological innovation, and continuous employee development significantly contribute to the resilience and adaptability of dairy firms in this evolving business environment. In Kenya, Kiambu County is one of the counties that strives to position itself as a certified food firm's hub, thus making the Balanced Scorecard perspectives' influence on dairy firm is paramount. Consequently, this research explored opportunities and challenges experienced by certified dairy firms in Kiambu County. Also, it will analyze how to

effectively leverage the Balanced Scorecard framework to improve the overall performance.

1.1.4 Selected Balanced Scorecard Perspectives

Customers play an imperative role in determining the success of a company (Shah et al., 2018), explaining why companies formulate strategic plans aimed at promoting customer satisfaction, brand loyalty, and customer retention (Chidozie & Anayochukwu, 2020; Shah et al., 2020). Customer perspective is considered by Kaplan and Norton (2014) as a fundamental measure of a firm's performance.

To measure performance, key indicators such as customer satisfaction, increased sales, customer retention, and an increase in customer base are considered (Chidozie & Anayochukwu, 2020; Khan et al., 2020; Serha & Serha, 2021). As the company invests resources to improve customer satisfaction, it must measure the value of such efforts by also focusing on the financial gains. Companies are currently moving from the industrial to the information era. Manufacturing and service businesses in the information age must acquire new competencies to remain competitive. Businesses have therefore turned into intangible assets like customer relationships, expertise, high-quality processes, problem-solving skills, and innovation to carry out their new strategies. While financial metrics hold great importance, they are limited to past performance and do not reveal the company's future direction or potential for value addition.

Various studies in the banking, food industry, and manufacturing sector demonstrate a relationship between customer satisfaction and performance. In the banking sector,

excellent customer services, ease of use of mobile banking technologies, convenience, and effective communication have been linked to improved customer satisfaction and company's performance (Chidozie & Anayochukwu, 2020). Similar results were also obtained in the food industry where quality foods, good customer service, high standards of hygiene, and timely services were linked to customer satisfaction and a firm's performance in terms of increased sales (Serhan & Serha, 2021; Shah et al., 2021). Furthermore, the performance of the small and medium enterprises is largely attributed to customer satisfaction aspect (Tibbs & Langat, 2021; Zakari & Ibrahim, 2021). Thus, the important role of customer perspective measures in determining the performance of a company is indisputable. However, according to Kaplan and Norton (2014), customer perspective measures cannot by itself determine the performance of an organization. Other studies (Gupta & Chopra, 2020; Okorie, 2021), for instance, indicate that other measures of performance include improving internal business processes and embracing innovation. Kiambu County's dairy industry being one of the most competitive and dynamic business environments, customer perspective is essential in determining the success trajectory of dairy firms. According to Shah et al. (2020) and Serha and Serha (2021), the customers play a fundamental role in influencing the fortunes of a company. As a result, strategic planning efforts are paramount for the dairy companies. Therefore, the firms should focus on developing strong customer retention strategies, promoting brand loyalty, and elevating customer satisfaction. Consequently, Kaplan and Norton (2014) assumption, that the perspective of the customers is a crucial measure of a firm's performance, echoes well within the dairy industry in Kiambu County. As a way of gauging performance

effectively, dairy firms in Kiambu must employ key indicators, including the customer base expansion, customer retention, increased sales, and customer satisfaction (Chidozie & Anayochukwu, 2020; Khan et al., 2020; Serha & Serha, 2021). These metrics are crucial barometers as they offer insights into the firm's strategies effectiveness in attaining customer demands and expectations. Similarly, as resources are invested to improve customer satisfaction, the financial gains measurement is imperative.

Therefore, there is a clear relationship between financial performance and customers' satisfaction, and the dairy firms in Kiambu County recognize the essence of striking a delicate balance between attaining tangible financial returns and delivering exceptional customer experience.

In relation to other industries, the banking sector has demonstrated the connection between effective communication with enhanced customer satisfaction, user-friendly mobile banking technologies, excellent customer service, and overall company performance (Chidozie & Anayochukwu, 2020). Likewise, the food industry demonstrates these findings. For instance, where there are quality foods, timely services, excellent customer service, heightened customer satisfaction, and adherence to high hygiene standards, consequently there will be increased sales. Besides, customer satisfaction significance is not restricted to large organizations. Kiambu County's dairy sector, made of small and medium enterprises (SMEs), attributes their performance to fulfilling their customer expectations. As a result, this demonstrates the universal customer perspective influence across the entire spectrum of dairy firms, regardless of their size. However, as Kaplan and Norton (2014) argue, although the customer perspective is indispensable, it cannot

singularly determine organizational performance. Gupta and Chopra (2020) and Okorie (2021) and demonstrates the significance of enhancing internal business processes and embracing innovation as the primary elements of a comprehensive performance measurement framework, thus showing the multifaceted nature of performance metrics.

Such understanding is crucial in Kiambu County's dairy industry, as a universal approach to performance assessment is important for sustained competitiveness and growth. Therefore, as the dairy firms in Kiambu County navigate the complex dynamics of customer satisfaction, they should consider the related dimensions of innovation, internal processes, and financial performances, for them to attain a sustainable path to success.

According to Rapitasari et al. (2021), the internal business process perspective is an indication of what a business excels at. Usually, the internal business process should be aligned with the strategic goals of fostering customer satisfaction and financial performance (Okorie, 2021). In other words, management must formulate and implement strategic goals aimed at improving customer satisfaction and fostering a firm's financial growth objectives. The concept of organizational performance is complex, and smart managers know that understanding it is like flying an airplane: you must keep the oil pressure, speed, and altitude right while making sure you have enough fuel to finish the flight plan. Monitoring the organization's performance begins with assessing its financial health.

The "balanced scorecard" encourages managers to monitor how well the business is handling internal operations, offering first-rate customer service, and setting the stage for future improvements. This provides a succinct but comprehensive synopsis of the

business. Observing these four elements can also help people with self-evaluation, as the examples below show.

Internal business processes aimed at fostering customer satisfaction include enhancing employees' competency through training and employee appraisal (Okorie, 2021), using innovation to provide new products (Gupta & Chopra, 2020), improving quality and minimizing errors (Kaplan & Norton, 2014). On the other hand, fostering efficiency as a strategy of reducing wastage and introducing new products can lead to increased financial performance in an organization (Al-Dweikat & Nour, 2020). These studies illustrate how important the internal business process perspective is as a measure of firm's performance, especially based on customer satisfaction and organizational performance.

According to Okorie (2021), enhancing employee motivation through training and recognition played a fundamental role in promoting their productivity and relationship with customers eventually leading to positive organizational performance. Maheshwari et al. (2020) illustrated how innovation in the banking sector culminated into customer satisfaction and the growth of the banks in India and Nigeria, respectively. In Kenya, Tibbs and Langat (2021) determined a positive correlation between improved internal processes and financial performance of Tata Chemicals, which is in Magadi. From these studies, it is apparent that an improvement in internal processes can improve customer satisfaction which, as indicated before, is necessary in increasing sales and profitability of an organization. However, these studies assume that internal business process alone will lead to sustainable performance.

In agreement to Kaplan and Norton (2014), the internal business process perspective are critical indicators of a firm's prowess in executing its operational activities (Karisa & Wainaina, 2020). Consequently, strategic objectives that prioritize financial performance and customer satisfaction necessitate the implementation and formulation of strategic goals that can drive financial growth of a firm and enhance customer satisfaction. Strategies that seek to boost customer satisfaction through business processes involve complex approaches. For instance, such an approach may revolve around improving the worker's competency through appraisal mechanisms and continuous training. Understanding that a skilled and motivated workforce is better equipped to contribute to overall organization effectiveness and attain customer need is the rationale behind such approaches. Apart from enhancing the technical skills of employees, training initiatives also promote a customer-centric mindset. As a result, they align internal processes with the goal of delivering superior customer satisfaction.

Additionally, innovation is another integral aspect of internal business processes that influence organizational performance and customer satisfaction significantly (Gupta & Chopra, 2020). Apart from the firm's ability to stay ahead of market trends, introduce and innovate new products contributing to customer satisfaction, it also positions the firm as a market leader. Maheshwari et al. (2020), demonstrates the significance of innovation in the banking sector translated into enhanced customer satisfaction, hence contributing to the growth of banks in Nigeria and India. Subsequently, promoting innovation in the dairy sector in Kiambu County could similarly result in heightened customer satisfaction, enhanced production processes, and development of new dairy products.

Unquestionably, quality management is the most essential element of internal business processes, with an emphasis on consistently improving service or product and minimizing errors that may occur. Subsequently, Kiambu County dairy firms must minimize defects and maintain high standards to enhance customer satisfaction. Additionally, reducing operational costs associated with rework and customer complaints is essential. The search for operational excellence is similar with the objective of promoting customer satisfaction. Besides, it significantly contributes to the organization's financial performance. When pulled effectively, efficiency is a strategic lever that is likely to result in positive outcomes in terms of introducing new products and minimizing wastage (Al-Dweikat & Nour,2020). In addition to the significant contribution to cost savings because of lean and efficient internal processes, companies also enjoy the paved way for agility in responding to market demands. The Kiambu County dairy industry experience dynamic consumer preference and intense competition. As a result, the efficient internal process's role in driving financial performances is prominent. However, according to studies by Tibbs and Langat (2021), Kenya has a positive relation between enhanced internal processes and the financial performance of Tata Chemicals in Magadi.

These findings prove that streamlined internal processes can lead to a ripple effect, hence influencing the overall organizational success positively. Such empirical evidence offers valuable perceptions for Kiambu County dairy firms. As a result, they suggest that strategic focus on internal business processes is key in attaining sustainable performance and growth. Conversely, although internal business processes are instrumental, they are not sole determinants of sustainable performance (Okorie, 2021). The interconnected

nature of organizational success needs a holistic perspective that considers additional dimensions, including embracing innovation and customer satisfaction, to fortify the competitive position of the firm in the market.

Kaplan and Norton (2014) indicated that organizations needed to focus on fostering their competitive advantage through innovation and continuous improvement. Innovation is determined by knowledge, explaining the need to promote a culture of learning and change in an organization (Moustaghfir & Schiuma, 2020; Werlang et al., 2020). Innovation, according to Werlang et al. (2019), is measured by factors that include risk-taking, reactivity, and being open to change and creativity. Kaplan and Norton (2014) indicated that technology leadership, product focus, and time to the market goals illustrate the innovation and learning perspective. To measure performance, however, the organization should focus on the number of sales of the new products, the time taken to introduce the new products to the market, and the impact of continuous improvement on customer satisfaction. Firms with innovative and learning cultures can anticipate future changes or challenges causing them to exploit opportunities to avoid losses (Otioma, 2022). Creativity helps an organization to implement new ideas to boost customer satisfaction and growth.

The innovative and Learning Perspective is a crucial dimension in the performance evaluation framework for certified dairy firms in Kiambu County. In the dynamic dairy industry, promoting continuous improvement and competitive advantage through innovation is imperative for long-term success. Werlang et al. (2020) argues that innovation is tied to knowledge, giving emphasis on the necessity of cultivating a change

and learning culture within the organization. In addition to a strong learning culture enhancing the workforce capabilities, it instills a proactive approach towards focusing on staying ahead of industry trends and embracing change. In the certified dairy firms' context, where market demands and consumer preferences evolve rapidly, commitment to continuous learning is a strategic imperative. Creativity, openness to change, reactivity, and risk-taking are the primary factors that contribute to measuring innovation (Werlang et al., 2020). Such factors highlight the complex nature of innovation, surpassing mere technological advancements to include the capacity of the organization to promote a creative environment and adapt and take calculated risks. Kaplan and Norton (2014) focus on product focus, technology leadership, and time-to-market goals is in line with Werlang in reinforcing the significance of a learning-oriented and innovative perspective in strategic management. Measuring innovation and learning within the dairy industry in Kiambu County involves assessing multiple aspects, including the introduction of new products. Tracking the number of sales that come because of new products offers a tangible success indicator of the success of innovative efforts. Consequently, this does not only indicate the ability of the organization to innovate but also its adeptness in attaining consumer demands.

Additionally, time-to-market goals further accentuate the importance of efficient innovation processes. Dairy industry being a rapidly evolving industry, the ability to bring new products to the market is a critical factor in attaining a competitive edge. Evaluating the time taken to introduce new products is a vital performance metric that reflects the firm's responsiveness and agility to market dynamics. Another vital part of the Innovation

and Learning perspective is the effects of continuous enhancement on customer satisfaction. According to Otioma (2022), there is a significant link between the continuous improvement culture and the firm's ability to anticipate and respond to future challenges and changes. Since customer preferences are vital for dairy firms in Kiambu County, the ability to implement continuous improvement initiatives has made a significant contribution to enhanced consumer satisfaction. Promoting a culture that implements and values new ideas enables organizations to ensure their services and products remain in line with customer expectations, thus driving growth.

According to the theory of the balance score card, both financial and non-financial metrics should be used to assess a company's performance. According to the theory of the balance score card, performance should be evaluated in terms of the client, internal procedures, learning and development, and financial considerations. According to the contingency theory, there is no one-size-fits-all blueprint because every organization has a different organizational culture and perspective on risks (Su et al., 2020). According to Kaplan and Norton (2014), companies combine their growth strategy which aims to boost revenues with their productivity strategy, which aims to reduce expenses, depending on the adopted strategy. According to Kaplan and Norton (2014) small businesses in dairy farming can improve their financial performance by implementing the four perspectives of the balance score card. The balance scorecard incorporates financial metrics such as return on investment, dividend yield, and earnings per share among other metrics to assess the performance of an organization.

1.1.5 Dairy Firms in Kiambu County, Kenya

Dairy farming is fundamental to the Kenya's economy. Kenya has over 700,000 small-scale farmers who produce about 80% of the national input. Dairy farming is fundamental to the economy contributing about 12% to agricultural gross domestic product. The dairy sector faces performance challenges, that include lack of compliance with safety standards and adulteration, explaining why government of Kenya unsuccessfully attempted to implement policies aiming to encourage only the consumption of processed milk. Such challenges can affect the quality of the products and cause fears among consumers, leading to reduced consumption, hence, negative financial performance of the dairy firms (Karisa & Wainaina, 2020). According to Karisa and Wainaina (2020), milk-related illnesses have been reported in the dairy sector in Kenya. There is also a general lack of efficiency, adoption of technology, and customer management systems that are fundamental for improved performance. However, studies on how balance scorecard can be used to contribute and measure dairy firm's performance in Kenya are lacking.

1.2 Statement of the Problem

The Balanced Scorecard (BSC) framework, developed by Kaplan and Norton, offers organizations a multi-dimensional approach to performance measurement by integrating both financial and non-financial indicators. While this framework has been successfully applied in many sectors globally, its application in Kenya's dairy sector remains limited and underexplored. Dairy firms contribute significantly to employment, food security, and national revenue, yet their performance remains constrained by inefficiencies in operations, customer management, and innovation uptake.

Existing studies in Kenya have either focused on a single performance indicator—such as profitability—or applied the BSC framework in other industries, with minimal emphasis on how individual BSC perspectives influence performance outcomes in dairy firms (Karisa & Wainaina, 2020). Moreover, many of these studies suffer from methodological limitations, including small sample sizes, unclear units of analysis, and weak contextual relevance.

There is thus a pressing need for empirical research that isolates and examines the specific influence of selected BSC perspectives—namely, financial, customer, internal business processes, and innovation—on the performance of dairy firms in Kiambu County in Kenya. This study seeks to fill that gap by applying an aggregate analysis approach, treating each BSC dimension as a distinct predictor of firm-level performance.

1.3 Purpose of the Study

The purpose of the study was to determine how the application of selected balance scorecard perspectives influences the performance of dairy firms in Kiambu County, Kenya.

1.4 Objectives

1.4.1 Main Objective

The main objective of the study was to establish the relationship between the selected BSC perspectives and the performance of dairy firms in Kiambu County- Kenya.

1.4.2 Specific Objectives

1. To establish the influence of customer perspective on the performance of dairy firms in Kiambu County.
2. To determine the influence of innovation and growth on the performance of dairy firms in Kiambu County.
3. To assess the influence of internal business process on the performance of dairy firms in Kiambu County.
4. To investigate the influence of financial perspectives on the performance of dairy firms in Kiambu County.

1.3.2 Hypotheses

H₁: There is no significant relationship between customer perspective and performance of dairy firms in Kiambu County.

H₂: There is no significant relationship between innovation and growth and performance of dairy firms in Kiambu County.

H₃: There is no significant relationship between internal business process and performance of dairy firms in Kiambu County.

H₄: There is no significant relationship between financial perspective and performance of dairy firms in Kiambu County.

1.4 Justification of the Study

Dairy farming is a source of livelihood to many small-scale farmers in Kenya. The negative impact on the performance of the dairy firms could have a negative economic impact on many families and the country. This means more families will sink into poverty as their main source of economic empowerment is affected. Thus, the present study seeks to provide findings that could help to contribute and measure performance of the dairy firms for the benefit of farmers and Kenya, which benefits through increased revenue.

1.5 Limitation of the Study

The research encountered several limitations that should be acknowledged to ensure the validity and reliability of the study. Main limitations of the study were relatively small sample size, which may have implications for the reliability and generalizability of the results.

A larger sample size would have provided a more representative and robust analysis, people not willing to give information, short duration, objectivity, and suitability of research instruments. Any biased interpretation of results could also affect credibility of results. Lack of objectivity in interpretation and designing research instruments increases risks to validity and reliability.

1.6 Delimitation of the Study

To address the threats to validity and reliability, researchers adhered to ethical principles of scientific studies, especially on conducting the research and interpreting results. When determining the sample size, the researcher applied a reliable method to obtain a

representative sample. A pilot study was also used to enhance the suitability of the research instrument so that it measured exactly what it is meant to.

1.7 Area of the Study

The study conducted in Kiambu County has been chosen as the location of study because dairy farming is one of the leading economic activities in the area. A 2021 report on milk production in Kenya by Tegemeo Institute of Agricultural Policy and Development, as cited in Muindi (2021), ranked Kiambu County as the highest producer of milk in Kenya for several years. In 2022, Githunguri Dairy Farmers Co-operative Society report indicated that despite persistent drought, Kiambu County generated a profit of about 1.1 billion from milk, which was significantly higher compared to other counties. Thus, Kiambu County becomes a better location for testing how the balanced score card helps to foster performance of the dairy firms. Apart from the economic perspective, the researcher chose Kiambu County because of the knowledge about the area, including several dairy firms. This was considered vital, especially for data collection purposes.

1.8 Significance of the Study

The study added value to the following stakeholders:

1.8.1 The Dairy Firms

Dairy firms could benefit from the results of the current study by applying the BSC perspectives to foster performance. For instance, by investing in profitable businesses and reducing the cost of operation the management can enhance performance of dairy firms.

Furthermore, by fostering customer satisfaction, the management can foster organizational performance through customer retention.

1.8.2 The Policymakers

Policymakers in the dairy firms could use the knowledge in this study to improve their decision-making. For example, the study indicated that enhancing customer satisfaction through quality products fosters customer retention. Using this knowledge, policymakers can make better policies that will improve customer satisfaction, leading to organizational performance.

1.8.3 The Body of Knowledge

The study was based on research gaps. Such gaps included the limited number of empirical studies in Kenya. Thus, this study contributed to adding more knowledge on application of BSC in dairy firms in Kenya to enhance performance.

1.9 Assumption of the Study

One of the assumptions is that the respondents will provide honest and credible information, improving the reliability and validity of results. Another assumption is that the sample size will be representative and suitable in enhancing reliability of the findings. Furthermore, research assumes that the pilot study will provide information that helps to modify the research instruments, increasing its validity. The reliability and validity of the findings in this study are pegged into these assumptions.

1.10 Operational Definition of Terms

Balance scorecard: A performance metric that provides companies with information to improve their internal operations to enhance performance (Su et al., 2020).

Customer Perspective: A performance metric that determines how customers are satisfied with the company's services or products which is a determinant of a company's success (Gupta & Chopra, 2020).

Internal business processes: Actions taken by a company to foster customer satisfaction and performance of a company (Al-Dweikat, et al., 2020).

Innovation: Creativity, risk-taking, and proactive measures aimed at promoting continuous improvement, customer satisfaction, and performance (Su et al., 2020).

Financial Perspectives: Performance metric to determine how a firm is doing financially, with the focus on measures such as profitability, revenue growth, cash flow, and return on investment (Su et al., 2020)

Firm Performance: Refers to achievement of organization's goal based on measures such as customer satisfaction, cost reduction, efficient use of resources, increased sales and profits, customer retention, and business expansion (Tibbs & Langat, 2021).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Chapter two synthesizes and analyses the findings of past studies in application of balanced scorecard in measuring and fostering business performance. Findings from empirical studies will be provided as well as the methodologies applied and the gaps. This section is divided into theoretical framework, empirical literature review, literature review gaps, conceptual framework, and chapter summary.

2.2 Theoretical Framework

2.2.1 Balanced Scorecard Framework

Overall, balanced scorecard is considered a performance measurement framework because of its holistic view (in addition to financial metrics, also focuses on operational and strategic aspects), performance tracking, decision-making, and continuous improvement. Thus, the balanced scorecard is a performance measurement framework that helps organizations align their activities with their strategic objectives across four perspectives which include financial perspective, customer perspective, internal process, and innovation and learning. The balanced scorecard framework is sufficient since it explained each of the four variables under investigation, including the dependent variable, firm performance. The financial perspective approach continues to give priority to the traditional financial data that it provides in terms of financial position and financial results.

Indicators of a financial perspective can, for example, be a growth of sales, profits, ROI, cash flow, or cost cutting. The stakeholders get insights into the financial perspective that helps them understand how efficient the organization is at accomplishing its financial goals and aims. The customer perspective determines the organization's efficiency based on the opinion of the customers at the point when they look at it. The metrics that are assessed within the aspect include customer satisfaction, loyalty, retention, and increased share of the market. Additionally, Identifying and attending to customer needs while maintaining a high level of service are mandatory for long-term operations. This point of view sheds light on whether the company is aligned with what the customers expect and desire.

The Internal Process Perspective is directed at internalization and operations as the fundamental sources of competitive advantage and ultimately, long-run profits. Aspects such as performance metrics, which include process efficiency, quality, innovation, and cycle time are considered internally. Through the process of optimization, businesses can save money and time, as well as raise the quality of their services and products. Besides, the enhancement of internal processes will improve the business's bottom line and customer satisfaction.

Innovation and growth perspectives evaluates an organization cover and its capacity to innovate, develop its workforce, and adapt to the changes in demand, competition, and technologies. Learning and growth Indicators can be such as staff grooming and learning, employee satisfaction, relevance, and innovation, as well as staff behavior. On the other hand, learning and growth support the presentation of organizational capabilities

improvements, invention of new processes, and staying competitive in a shaft of most innovative companies.

All in all, the Balanced Scorecard gives a comprehensive view of an organization's performance by focusing not only on the financial results but also the other non-financial objectives. The objectives play a major role in the success of an organization, which includes customer satisfaction, development of processes, and tautness. Performance Evaluation systems aptly measure critical areas such as financial performance, operational competency, and organizational growth. This encourages managers to strategically align their performance, efficiently allocate resources, and lead to successful long-term performance. This theory underpins this study based on its focus and on the core pillars of this study.

Figure 2.1:

Balanced Scorecard Framework



Source: (Kaplan and Norton, 2014)

2.2.2 Resource-Based Theory

Resource-based theory, originally proposed by Birger Wernerfelt in 1984 and later developed by Jay Barney in 1991, is proposed for this study. The rationale is because the resource-based theory is aligned with the propositions of the balanced scorecard performance measurement system. According to the resource-based theory, companies should exploit tangible and intangible resources to foster their competitive advantage (Agag et al., 2023). The stress is on what companies can do internally to influence the performance of the organizations. Both tangible resources (including raw materials, plants, and brand) and intangible resources (such as experience, culture, and knowledge), when exploited and used efficiently, can foster an organization's performance and give it a competitive advantage (Su et al., 2020). However, the competitive advantage is only possible if the resources meet the criteria of being valuable, rare, imitable, and non-substitutable. Thus, after the identification of the resources, the next important step should be to exploit and protect them for the benefit of the organization. From the theory, it is apparent that the company's value and competitive advantage is gained through its internal business processes, embracing an innovative and learning culture, and fostering continuous improvement to enhance customer satisfaction and organizational performance. Thus, the resource-based theory is relevant for the present study. Of the three theories discussed, the resource-based theory underpins this study based on its focus on both the tangible and intangible resources of determining performance. Furthermore, resource-based theory's assumptions are closely like balance score card perspectives, which is the focus of the present study.

2.2.3 Technology Adoption Model

Technology adoption model was proposed by Fred Davis in 1986. The theory explains the factors that predict the adoption of technologies in an organization. According to Davis (1986), the adoption of innovation in an organization is influenced by the perceived ease of use and the perceived usefulness. Technology and innovation are aimed at fostering positive outcomes in an organization which include, among other benefits, improved quality, efficiency, reduction of errors, and effectiveness (Su et al., 2020). However, skepticism over the usefulness of technology and the ease of use influence its adoption.

Davis (1989) predicted that if technology is perceived to be useful to an organization, it is more likely to be adopted. The usefulness of technology is measured by the value that it adds to the organization, including fostering the organization's continuous improvement and competitive edge (Gupta & Chopra, 2020; Su et al., 2020). However, the ease of use is not sufficient to guarantee the adoption of technology. Technology must be perceived as easy to use to perform duties. In other words, users of technology should require little supervision when using technology. Employees should feel competent enough to apply the technology in their work. Thus, it is fundamental that organizations ensure that employees possess the necessary skills and knowledge to use technology.

Technology adoption model demonstrates the importance of innovation in an organization. The adoption of innovations helps an organization to gain a competitive advantage, especially if the technology aligns with the strategic goals of the company (Al-Dweikat & Nour, 2020; Gupta & Chopra, 2020; Tibbs & Langat, 2021). Adoption of technology is considered vital because organizations face external challenges that require

creative and innovative approaches (Al-Dweikat & Nour, 2020). Other studies indicate that a culture of innovation is necessary to help an organization embrace useful technologies (Gupta & Chopra, 2020; Tibbs & Langat, 2021).

Studies have tested Technology Adoption Theory and its influence on technology adoption and performance. By understanding the barriers to technology adoption, organizations can address the problem by creating a culture of innovation (Su et al., 2020), which culminates in organizational positive outcomes (Al-Dweikat, et al., 2020; Jiménez-Jiménez & Sanz-Valle, 2020; Moustaghfir & Schiuma, 2020). The positive outcomes are in the form of increased productivity, ease of work, improved quality, and efficiency (Al-Dweikat & Nour, 2020; Moustaghfir & Schiuma, 2020). From previous studies, technology adoption theory applies to this study by addressing the research question of innovation and its influence on performance.

2.2.4 Value-Percept Disparity Theory

The Value-Percept Disparity Theory corresponds to the customer satisfaction objective in the current study. The theory was formulated by Locke (1967) but was later developed by Westbrook and Reilly (1983). The key argument from the Value-Percept Disparity theory is that customer satisfaction is influenced by the perceived value of the product and its desirable traits (Greenwood & Mir, 2020). Furthermore, if the product meets or exceeds expectations, customer satisfaction is enhanced. The satisfaction is an emotional response influenced by the cognitive-evaluative process in which the product or service is compared with the customers' needs, desires, and expectations.

The validity of Value-Percept Disparity theory has been tested in various studies. For instance, Ganesh et al. (2021) established that by producing goods and services that address customer needs, companies could increase sales and profitability. In another study, Furthermore, the same researchers determined that customer satisfaction was largely influenced by improved quality and desirability of the product to the target customers. Thus, it is fundamental that the strategic goals of the company be aligned with the vision of fostering customer satisfaction. As a result of increased customer satisfaction, it is possible to foster an organization's performance.

2.3 Empirical Literature Review

2.3.1 Influence of Customer Perspective on Performance

Several studies indicate a correlation between the implementation of customer perspective strategic objectives and customer satisfaction and performance (Serhan & Serhan, 2021; Zakari & Ibrahim, 2021) conducted quantitative research using a sample size of 330 from 2779 supermarkets in Ahwaz in Iran. The goal was to determine the influence of customer satisfaction on performance. The results indicated a positive correlation between customer satisfaction and the performance of the supermarkets. To foster customer satisfaction, many supermarkets focused on improving quality, price, delivery time, and excellent customer services. The resultant performance measures included return customers, increased sales, and profitability. In another similar study, Zakari and Ibrahim (2021), it determined that customer satisfaction was linked to robust financial performance. The study was quantitative and used a sample of 100 small and medium enterprises in Nigeria.

The business performance was measured mainly from a financial perspective, with the focus being on the return on investment.

In Pakistan, Khan et al. (2020), using a sample of 120 customers obtained from leading restaurants (KFC, Pizza Hut, Chief, Arbain Chick), determined that by focusing on customer satisfaction, the hotels fostered customer retention, loyalty, and increased sales. This study corroborated the findings of another study by Serhan and Serhan (2019), which applied a quantitative study and using a sample of 676 students in Lebanon. The findings indicated that customer satisfaction encouraged consumption of food from cafeteria, leading to its financial performance. In Kenya, Karisa and Wainaina (2020) determined that customer perspectives such as responsiveness to patient's needs, offering specialized services, and focusing on quality improvement resulted to the institution's performance through improved patient satisfaction, reduced mortality, timeliness of services, and cost reduction. Thus, from the studies, a focus on customer perspectives on strategic objectives plays a fundamental role in improving the performance of a firm. However, these studies assume that paying attention to solely on customer satisfaction is sufficient determinant of organization performance. However, some studies (Maheshwari, 2020), indicate that internal business processes and innovation are other integral parts of the performance measurement systems that ought to be considered.

The level of service quality in the hospitality sector determines the level of customer satisfaction. Abuelhassan and AlGassim's (2021) research explores the distinctive collaborative influence of procedural justice (PJ) and distributive justice (MC) on the visionary customer service performance (PCSP) and general self-efficacy (GSE) within

the realm of the hospitality industry. Also, the study seeks to quantify the concurrent impact of these variables on PCSP while maintaining control over GSE. This study used a three-wave data collection method involving 380 former manager-subordinate pairs from 18 five-star hotels. Structural equation modeling was used to establish construct validity and test hypotheses. Results indicate that general self-efficacy (GSE) mediates the relationship between distributive justice (DJ) and perceived peer support (PCSP) and between procedural justice (PJ) and PCSP. In addition, the effect of DJ and PJ on GSE and PCSP was positive. This study addresses the nexus of organizational justice, general efficacy, and visionary client service performance in the hospitality sector. Moreover, the research holds practical counteraccusations for hospitality operations, emphasizing the significance of organizational justice in fostering hand self-efficacy and visionary service actions. The study identifies a vital research gap related to the impact of organizational justice (OJ), particularly distributive justice (MC) and procedural justice (PJ), on visionary customer service (PCSP) in hospitality care. Previous studies have investigated the effects of colored plant climates on visual performance, but the specific impact of exposure on PCSP has remained unexplored. This gap is highlighted as the study notes a lack of attention to the corresponding impact of organizational justice, providing an opportunity to investigate this aspect further and promote a comprehensive understanding of the factors influencing PCSP in the hospitality industry.

According to Hariandja and Vincent (2022), customers play a crucial in influencing the performance of the business operations. In this study, data was gathered using quantitative methodology and descriptive research design. Respondents are given online

questionnaires via Google Forms and those who have stayed at international hotels with four to five stars in Indonesia make up the selected population. Hariandja and Vincent's research immensely contributes to understanding the dynamics of customer relationships in the hotel industry, specifically in Indonesia. However, further research could delve into the nuances of cultural influences and explore the effectiveness of specific strategies for enhancing customer experience and loyalty in diverse international hotel settings. The authors define customer satisfaction as the level of fulfilment and the perception of meeting or exceeding consumer expectations. When consumers are satisfied, businesses experience higher sales and vice versa. This concept helps explain customers' influence on an organization's overall operations. Further, the article stresses the role of satisfaction in customer loyalty and the success of the hospitality industry.

With a sample size of 240 respondents, the selected population consists of travelers who have stayed in Indonesian 4–5-star international hotels. The outcomes of the outer and inner models are then examined by processing the acquired data with Smart PLS v. 3.3.

3. The findings demonstrate that, as seen from the customer's point of view, customer satisfaction affects customer loyalty. Customer loyalty also has an impact on brand value, which includes brand performance and power. Thus, customer loyalty is a powerful indicator of brand value in the hospitality and tourism sector. The research gap for this study is that it focuses on 4-5-star international hotels in Indonesia, limiting the generalizability of findings to other contexts. The limitation of examining a specific segment within a single country needs to be revised to ensure the connection of the results to different hospitality settings encyclopedically. To enhance the study's applicability and

contribute astronomically to the field, future exploration should explore a diverse range of hospices across various regions, considering implicit cultures, profitable, and functional differences that could significantly impact client experience, satisfaction, and fidelity dynamics in the hospitality assiduity.

According to Agag et al. (2023), the influence of customer feedback metrics on firm or organizational performance has been ignored in most operations within businesses. The researchers of this study used the American Customer Satisfaction Index to gather information on financial performance, marketing initiatives, and customer feedback metrics from 2005 to 2020. The study used a multiple regression panel analysis to investigate the influence of customer feedback metrics like Top-2-Box and NPS value on various organizations' performances, such as gross margin and sales growth. The study's research findings indicated that Top-2-box is the best customer feedback metrics predictor for evaluating companies in the online book, healthcare, and shopping sectors. Conversely, consumer satisfaction emerged as a positive electronic and telephone viewing predictor. CES has found CFM to be the most effective for comparing companies in the restaurant industry. NPS is an excellent tool for evaluating different companies on the reliability of their vacation spots. These results increase the board's request to guide the allocation of resources for the best investment in CFM to improve all building activities. The research gap for this study lies in the need for accurate identification of the most effective client feedback metric for driving firm performance, as studies have yielded inconsistent results. Also, the operation of CFMs is limited to specific surroundings and diligence, creating a critical gap in marketing literature, and hindering a comprehensive

understanding of which CFMs contribute most significantly to firm performance across different settings.

2.3.2 Influence of Internal Business Process on Performance

Internal business process fosters customer satisfaction and the performance of an organization. Many studies indicate a relationship between the implementation of the strategic objectives of internal business process and organization performance (Maheshwari et al., 2020; Okorie, 2021). A study by Namin and Ebrahimpour (2020) used a quantitative study and a sample of 173 from Imam Khomeini Relief Committee in Iran where it was determined that training, effective communication, and better change management strategies helping to improve the outcomes. Maheshwari et al. (2020) studied the impact of internal business processes on the performance of the banks in India. The authors used a systematic review of literature. From the findings, internal business processes strategic objectives such as operational excellence, geographical reach of customers, reducing cost of business, and operational capabilities led to performance that was measured through profit per employee, growth in total business, and growth in branches.

In Nigeria, Okorie (2021) determined that fair employee appraisal, training, quality assurance measures, and effective utilization of the resources were fundamental in improving the performance within the civil service. Similar results were obtained by Karisa and Wainaina (2020) who found a link between reduced medical errors, minimal hospital infections, improved quality services, and timely services on customer satisfaction and the general performance of healthcare institutions. Maheshwari et al.

(2020), established that the focus of internal business processes should be on improving customer satisfaction. From the reviewed studies, it is apparent that the internal business process gives a business a competitive edge. Again, however, these studies seem to focus more on the role of internal business processes and ignore the importance of other performance measurement systems, including innovation and learning. Additionally, some studies used small sample sizes making it difficult to generalize the results to other cultural settings.

Aydiner et al. (2021) employed cross-sectional postal survey methodology administered through a well-structured questionnaire. The study proposes a resource-based (RBV)-based model to investigate the impact of BA implementation on business process performance (BPER) and its subsequent impact on firm performance (FP). The study focuses on the Turkish business environment and collects data from 204 middle-level business managers from various industries. To ensure content validity, the research team conducted in-depth interviews with technology leaders and participated in academic expert discussions. In addition, a pre-test conducted with business professionals enabled the study to be refined. The sample consisted of 204 middle or senior business managers in Turkey representing various industries. The research's target respondents were mainly the organization's managers and CEOs who are the primary decision-makers of the organization. Besides, the research targeted the mentioned group because they are in a position of the primary information of the organization. The process of studying and focusing on many different industries and involving key executives helped the researcher increase the generalizability of the information obtained from the organization and the

external validity of the results. The findings show that the research investigated the relationship between business analytics (BA) adoption and firm performance (FP) with particular attention to the mediating role of business process efficiency (BPER) in the Turkish business environment. Further, the findings showed a positive relationship between BA and BPER implementation. In addition, a positive relationship emerged between BPER and FP, and BPER fully mediated the relationship between BA and FP. This means that the effect of BA adoption on FP is not direct, but rather channeled through its effect on the effectiveness and efficiency of internal business processes. Despite these contributions, there are still gaps in literature, especially regarding the specific mechanisms through which BA adoption affects firm performance and the mediating role of BPER. The study addresses these shortcomings by adopting a resource-based view (RBV) and providing empirical evidence on the Turkish business environment.

Hameed et al. (2021) study was conducted in a survey of the hotel industry in Pakistan, focusing on Pearl-Continental Hotels and Resorts, a major player in the industry. A combined sample of 285 supervisors constituted a representative sample for the study. The study used a methodological approach of a carefully structured survey that collected data on external knowledge, internal innovation, organizational and open innovation, service innovation and business performance. The questionnaire items were adapted from established scales used in previous studies. The data collected was analyzed through PLS-SEM (Partial Least Squares Structural Equation Modeling) using Smart PLS 3, an advanced estimation technique widely used in the hospitality and tourism industry. PLS algorithm with bootstrapping methods helped determine the loadings, path coefficients

and significance levels. The study and its results reveal several essential relationships in the specific context of the Pakistani hotel industry. Organizations and open innovation practices positively impacted both service innovation and business outcomes. In addition, companies' external expertise and internal and open innovation affect service innovation and entrepreneurship. These findings highlight the importance of using superficial knowledge and fostering internal innovation processes to promote open innovation, which positively impacts service innovation and overall hotel performance.

Although the study improves our understanding of the relationship between external knowledge and internal innovation, further research is needed on open innovation, service innovation and business performance in the Pakistani hotel industry. The study recognizes the need to explore more factors to enable open innovation, including intellectual property rights. In addition, the study highlights the neglect of the role of companies and the performance of open innovation in the hotel industry in previous literature. Future research opportunities lie in addressing these gaps and delving into the multifaceted aspects of open innovation strategies, particularly in the unique context of the Pakistani hotel industry.

Singh and Misra's (2021) research aims to identify the multifaceted relationships between internal business processes, firm performance, and the moderating influence of corporate reputation. In a globalized business environment, the efficiency of internal processes has become a determining factor for organization and success. The research carefully gathered the opinions of 340 senior managers and directors of European multinational companies using a methodological approach consisting of two main stages. Researchers involved 340

European multinational companies in collecting data. The research employed a two-phase approach methodology, where a theoretical model based on the strategic paradigm of the literature was built in the first phase. The following phase employed hierarchical regression analysis to evaluate and vividly examine the relationships initially identified in the theoretical model. The finding of Singh and Misra's (2021) study showed that CSR, which primarily targets external interest groups of various organizations, affects workers' performance. More specifically, the research findings showed that the effects of CSR on the performance of most organizations under the study differed between established and less established firms. Despite the extensive study on the organizational relationships between CSR and workers' performance, Singh & Misra's study required thorough investigations of various CSR dimensions, particularly the community, employee, and customer, in European MNEs. To bridge the gap in Singh & Misra's study, this research provides a nuanced analysis of the dimensions and their complex interactions, resulting in better comprehension of the effects of internal business processes on organizational performance.

2.3.3 Influence of Innovation and Learning on Performance

According to Kaplan and Norton (2014), the competitive edge of a company and its sustainable growth is pegged on its ability to innovate and remain committed to continuous improvement. Empirical studies have shown a link between innovation and learning strategic objectives and performance of organizations (Al-Dweikat & Nour, 2020; Tibbs & Langat, 2021). Organization learning refers to process through which organization acquire knowledge and integrate it within the organizational culture to foster

significant improvements in performance (Al-Dweikat, et al., 2020; Tibbs & Langat, 2021). Jiménez-Jiménez and Sanz-Valle (2020) conducted a study of 451 Spanish firms using a quantitative study. The findings indicated that the use of knowledge, creativity, and innovation culminated in positive performance of firms. Adoption of technology helped to reduce wastage of resources, improve timely delivery of services, improve quality, and enhance customer satisfaction. These factors were linked to positive performance of the firms in India.

Tibbs and Langat (2021) illustrated how the application of innovation and learning strategic goals culminated into positive performance of the Tata Chemicals in Kenya. The study indicated that innovation helped to reduce administrative costs, improve efficiency, and fast-track production processes. Hence, it is fundamental that companies commit to creating innovative cultures to foster competitive edge and performance (Al-Dweikat & Nour, 2020; Tibbs & Langat, 2021). Furthermore, Kaplan and Norton (2014) advocated for visionary leadership for effective implementation of the balanced scorecard. Without effective leadership, Kaplan and Norton (2014) indicated that fostering a sustainable competitive edge was almost impossible. From the findings, it is apparent that innovation and learning perspectives are fundamental in measuring and determining the performance of an organization.

According to Gupta et al. (2021), the influence of innovation and learning on organizational performance is a dynamic and interrelated process. Moreover, the study deduces that companies can enhance their innovation capabilities and portfolio by utilizing crowd intelligence and knowledge through innovation. In their study, Gupta et

al. (2021) collected data from 164 entrepreneur respondents who included organizational managers, the companies' owners, and various Indian small to midsize enterprises. Later, the collected data was subjected to structural equation modeling (SEM) analysis method to investigate the complex interconnectedness between various variables and a better comprehension of the relationships involved in the concepts. The findings of the research concluded that various concepts like SMTU, IC, EO, and IP are supported by the study's model. The researchers concluded that SMTU is the most critical factor involved in the study of Indian businesspeople. Besides, the factor can be used to support the idea that addictive content is crucial in business operations. The results show how much employers value and expect to use social media to solicit new products, sales pitches and customer feedback on product development. This research fills a notable void in the literature by investigating the hitherto unstudied relationship between social media technology use (SMTU), invention capability (IC), entrepreneurial exposure (EO), and invention performance (IP) among Indian entrepreneurs. The study integrates these factors and examines their joint impact on IP. However, the effect of SMTU on entrepreneurial processes and the influence of IC on EO have been thoroughly investigated. One hundred sixty-four entrepreneurs will complete a questionnaire as part of the exploration design, which uses structural equation model (SEM) analysis. The results highlight SMTU's critical role in innovation enhancement, highlighting its worth to entrepreneurs in improving overall organizational performance and gaining consumer perception.

Santos and Brito (2020) investigates various organizational structures within manufacturing firms while assessing their innovation capabilities. Using manufacturing

companies in Brazil, the authors conducted an innovation survey. This paper analyzed a sample of 1,156 firms. Methods of multivariate data analysis were applied to the collected data. Different organizational forms within the company could be identified using an innovative capabilities approach. The study results show that the firm's organization can be classified as advanced, intermediate, or basic. Each type presents different innovation capabilities arrangements. The company's organization, which is both advanced stability-oriented and change-oriented, is linked to successful innovation strategies.

This research adds to the body of literature by offering an alternative perspective on the establishment's association, which includes the capabilities approach and, consequently, a more sophisticated stance on the perception of diversity in enterprises. This study helps close the knowledge gap in the literature regarding how businesses internally integrate their various capabilities into a logical association to maintain innovative behavior. According to the research, directors can use these simple findings as a guide to implement changes within their organizations that will promote innovation. Once it's connected as an essential tactic for competitiveness, directors can examine its association to stimulate innovation. Directors may find this study helpful in understanding the risk involved in clinging to stability-driven capabilities in the absence of change-driven capabilities in a reasonable and developmentally aligned position. The result could be a cost structure that grows more slowly than the implicit return. Directors should once more be aware that stability-driven capabilities are a necessary complement to previously change-driven capabilities.

According to Ganesh et al. (2021), a complex relationship exists between the capability of organizations and the leadership styles employed in carrying out the operations. Besides, organizational learning and innovative culture play a significant role in the internal processes of organizations and companies, especially in Malaysian manufacturing organizations. The study used a cross-sectional and correlational design employing a simple random sampling technique to collect data. To meet the effective and efficient study's objectives, the researcher distributed 550 questionnaires to the interviewees, of which 382 were returned, while the rest were destroyed. The research findings showed that organizational management and skills impact corporate sustainability.

Moreover, the various leadership styles used in organizations play a critical role in enhancing organizational learning. However, it was notable that the leadership styles did not impact on the organization's sustainability. In addition, the research identified that organizational learning plays a crucial role in mediating organizational skills, management approaches, and corporate sustainability within organizations. According to the research, this concept helps organizations transform the various operations of managing organizations and firms into sustainable business practices. Finally, the study notes the effect of organizational learning in carrying out corporate functions. One of the critical gaps evident in Bilan et Al's research is the insufficient number of respondents used to make conclusions on the impacts of organizational relationships. Nevertheless, exploring the intricate connections between organizational capabilities, commercial governance, and leadership styles creates a gap in this literature.

Santos and Brito (2020) study makes an essential contribution by revealing four different types of business organizations based on the innovative capacity of Brazilian manufacturing firms. The study highlights the importance of both stability- and change-oriented organizations for successful innovation. However, it addresses a gap in literature by providing a nuanced understanding of how firms combine their capabilities for sustainable innovation. The research and originality lie in using an extensive dataset of the development economy, which provides managers with valuable information about the strategic adaptation of organizational structures to innovative goals.

2.3.4 Financial Perspective and Performance

Metrics measuring financial performance shed light on how successful strategies, execution, and implementation are increasing profitability. Growth, profitability, and shareholder value are the three main objectives of the finance industry. The three primary financial objectives of ECI were to "survive, thrive, and prosper." Cash flow was used to gauge survival, operating income and quarterly sales growth to gauge success, and growing market share and return on equity to gauge prosperity. According to Fatihudin (2020), financial measures have been criticized by many due to their well-established shortcomings, retrograde orientation, and incapacity to represent actions that create value in the present day.

Financial performance refers to the state of a company's finances over a specific period, including the amount of money received and spent. It is influenced by some variables, including the capital adequacy ratio, liquidity, leverage, solvency, and profitability.

According to Fatihudin (2020), a company's financial performance serves as a gauge for its resource management and control capabilities. Financial statements, which comprise the balance sheet of profit and loss computations along with additional financial information like cash flow and retained earnings, serve as a representation of a company's financial status. The methodology used in this article is a literature review. The study's main objective is to analyze finances using the company's financial performance report. The financial performance of a company will indicate its overall health. Either a surplus or a deficit exists in the company.

Finance expertise is necessary for analyzing financial performance and financial statements. A sample of 448 food companies from 50 countries were analyzed between 2009 and 2020. For evaluating CSR, we used financial measures such as price-to-earnings, market capitalization, profitability ratios, and dividend payout ratios. The results showed that CSR reporting was a key differentiator for businesses in terms of profitability, OE, market capitalization, and share price. Investors look at the CSR practices that are put into place and recorded in reports as a major sign of a company's sound financial standing and capacity to engage in CSR without having a detrimental effect on performance.

The examination of financial performance is deemed necessary in management science research because it plays a significant role in an organization's capacity to expand, thrive, and endure. It is a measure of how much an organization has advanced both monetarily and operationally. Financial performance continues to be a major factor in organizational planning and development. Therefore, there is a clear correlation between financial performance and economic growth according to research on financial performance. In the

modern era, a wide range of non-economic factors impact the financial performance of both financial and non-financial firms. Improvements in GDP, currency rates, inflation, and liquidity were all significant contributors to improved financial performance. However, a company's R&D, customer satisfaction, corporate reputation, innovation, and employee commitment all play a significant role in determining its performance. Businesses that have innovative and modern policies, products, and services have an advantage in the competitive market of today. Companies that adopt creative policies are typically thought of as honorable and well-managed companies.

Effects of non-economic variables that act as a mediator between CSR and the financial performance of Pakistan's banking sector is the aim of this study. Thus, research that is based on current knowledge falls under the positivist paradigm. This study will use the hypothesis testing method, which is thought of as deductive, to look into the cause-and-effect relationship. Customized questionnaires were distributed to the target respondents; as a result, the approach is survey-based and combines the mono-method with cross-sectional data analysis. In Pakistan, there are 34 schedule banks with 12,993 branches. Because they are vital to Pakistan's economy, workers in the banking sector in the Central Region are the target population.

2.3.5 Firm's Performance

A qualitative study by Santos et al. (2020) determined that a firm's performance was measured by factors that included customer satisfaction, employee satisfaction, profitability, business expansion, and overall growth. The study was conducted in Brazil

through the analysis of interview information obtained from 116 senior managers. From the study, each of the measures of firm performance is vital, thus, cannot be used interchangeably (Santos et al., 2020). Using the stakeholder theory's perspectives, the researchers also established that firm's performance metrics are determined by the expectations and demands of the stakeholders. The main limitations of this study are the lack of a representative sample and low generalization since it applied a qualitative approach.

Corina et al. (2020) conducted a quantitative study seeking to establish the determinants of firms' performance. To achieve that, researchers obtained data from the manufacturing companies listed on the Chamber of Commerce and Industry in Romania. From a list of 7437 firms only 92 met the inclusion criteria and considered for the study. From the findings, the firm's performance is measured by both the financial and non-financial metrics. Factors that determine firm's performance included profitability and growth in sales, employee job satisfaction, customer retention, improved innovation, and improved corporate leadership. Thus, this study indicated that financial measures alone cannot provide an accurate picture about a firm's performance. The main limitation of the study, however, is that it focused on other industries and none on dairy firms.

Kourtzidis and Tzeremes (2020) investigated the determinants of firm's performance using a qualitative study and a sample of 72 firms obtained from a global database. Using a content analysis method, researchers established that compensation of the CEOs, the age, and the return on investments were the main determinants of the firm's performance. Younger CEOs with higher salaries and other benefits tend to foster better performance

within an organization. The rationale is that such leaders tend to be more innovative, motivated, and willing to take more calculated risks. Strong leadership was cited as a fundamental factor in determining organizational performance. Generally, empirical studies demonstrate that performance is best measured using both the financial and non-financial factors.

Determinants of financial performance to be linked to external and internal factors like real GDP, interest rate, and money supply, and internal factors like interest income, management effectiveness, and bank size. Using panel data and a fixed-effect model, the study investigated Ethiopia's state and private commercial banks between 2000-2020. Results show that in contrast to bank size, interest income and management effectiveness positively and significantly impact both returns on assets (ROA) and return on equity (ROE). Macroeconomic factors and genuine GDP positively and greatly influence ROA and ROE. Conversely, the money supply and interest rate had negligible effects on ROA but significant effects on ROE and ROE, respectively. The focus on financial structure and leverage underscores the intricate relationship between monetary variables and specific financial metrics. The study highlighted the combined impact of macroeconomic and bank-specific factors on financial performance, suggesting that managers and policymakers should prioritize both for effective performance management.

Alshehhi et al. (2020) investigated the connection between corporate sustainability and a company's financial performance. The study addressed the gap in research regarding the connection between the two aspects. The content analysis method was used to conduct the analysis based on previous literature, focusing on published journals. One hundred thirty-

two papers were selected for additional review, with a sizable majority (78%) of the reviewed documents reporting a positive relationship between corporate sustainability and financial performance. Nonetheless, "sustainability" is gradually being replaced by a more focused term that refers to Corporate Social Responsibility (CSR): a change that overlooks sustainability's environmental and economic aspects to emphasize the social component. One prominent gap in the literature was the lack of research conducted in developing nations, calling into question the findings' generalizability and stressing the need for more inclusive research considering a range of economic contexts.

Okafor et al. (2021) quantitatively evaluated the long-term growth of US technology companies in terms of spending on socially responsible causes. The research assessed panel data from the topmost 100 tech corporations on the S&P 500 between 2017 and 2019 using content analysis and fixed effects/pooled regression models. The study investigated the connection between corporate social responsibility (CSR) proxies and financial performance. The results indicate a positive relationship between higher revenue and profitability and CSR spending by tech companies. Contrary to earlier findings, there was no conclusive evidence linking CSR to Tobin's Q, indicating that although CSR positively impacted financial metrics, its influence on market valuation varied depending on the context.

Accounting Information Systems (AIS) affected financial performance. The study used an exploratory research design, relying heavily on secondary data and looking at a variety of empirical sources to find the connection between the two elements, concluding that the creation and application of computerized systems, which improve internal controls,

financial report quality, and the tracking of financial transactions, had the most significant influence on accounting due to information technology. To maintain productivity standards and ensure effective performance, the study called on organizations to prioritize the continued use of AIS, especially given the rapid development of technology. The study acknowledged the existence of gaps, including a lack of focus on a specific industrial context, different methods and potential biases. The study required a deeper approach to fully understand the relationship between AIS and financial performance.

A research study by Ahinful et al. (2023) sought to determine the factors influencing financial performance (FP). The study narrowed down to the Ghanaian SMEs in ascertaining the impact of different elements that defined FP. Multiple regression analysis was used to examine survey data from 238 SMEs. The study investigated how FP is affected by industry and firm-specific factors. Ultimately, a positive correlation was noted between firm age, size, FP, and a significant industry effect for the service sector. Additionally, there was a meaningful relationship between company ownership type and FP. According to the results, the impact of industry and firm-specific traits varies between FP sub-components and the manufacturing and service sectors. The study provided insights into FP variations in the context of a developing country context and is consistent with the resource-based view and the structure-conduct-performance frameworks. Policy and managerial qualifications were examined. Nonetheless, the study successfully addressed the gaps in the sector, like the requirement for more exploration of specific industry undertones and the consideration of external economic factors influencing FP.

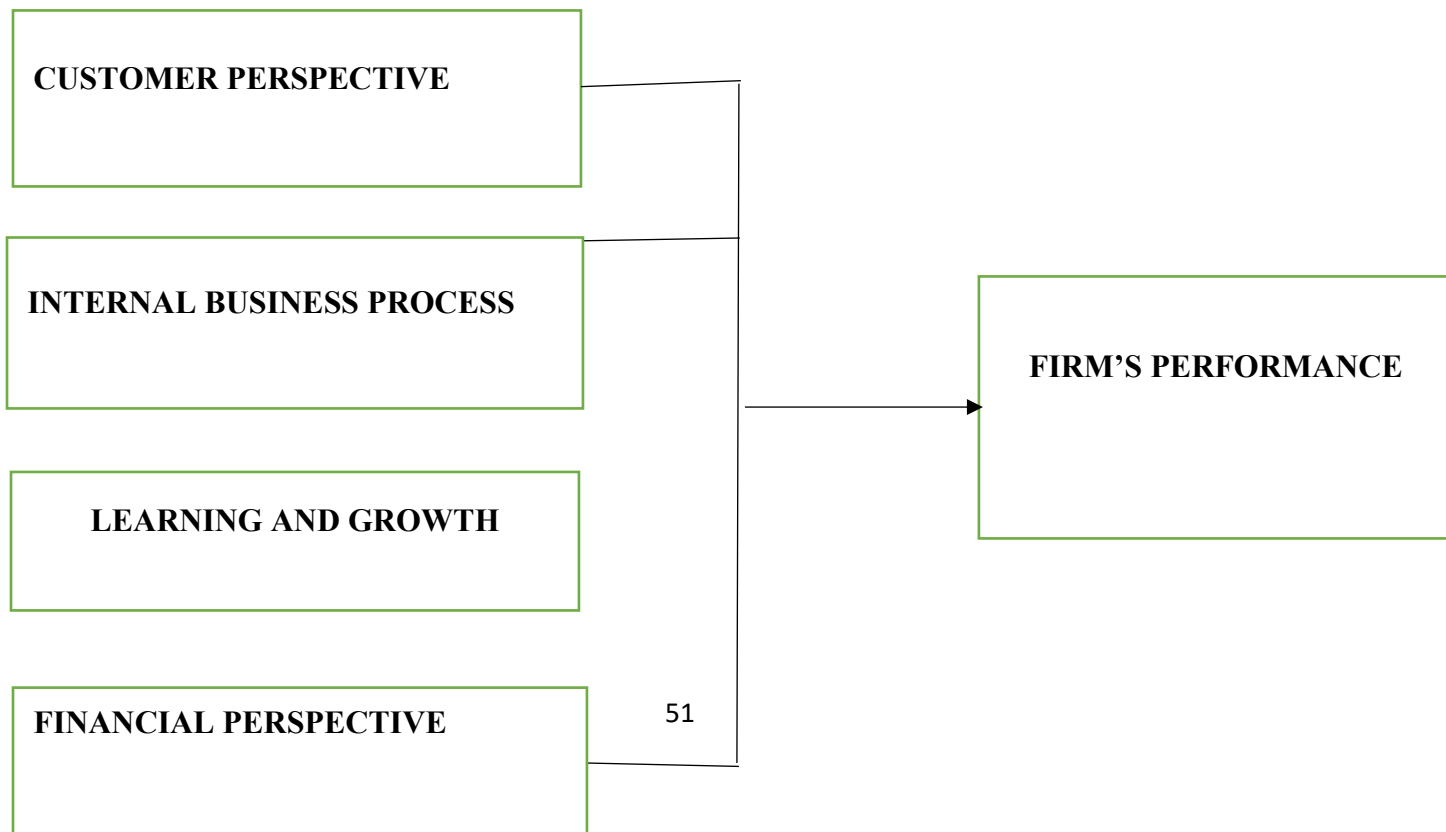
2.4 Summary and Gaps from the Empirical Review

There is multiple research gaps identified from the previous studies that necessitate this study. For instance, most studies failed to consider the internal business processes and innovation, which are integral parts of the performance measurement systems. Additionally, most studies used small sample sizes making it difficult to generalize the results to other cultural settings. Also, most studies highlight the neglect of the role of companies and the performance of open innovation in the hotel industry in previous literature. Lack of representative sample in most of the studies affecting generalizability. Most studies focused only on a single performance measure and assumed that it was sufficient to foster sustainable performance.

2.5 Conceptual Framework

Figure 2.2

Conceptual framework



Source: Author, 2023

INDEPENDENT VARIABLE

DEPENDENT VARIABLE

This study adopts an aggregate influence model, where selected Balanced Scorecard perspectives—namely, financial, customer, internal processes, and innovation—are treated as distinct independent variables. Each dimension is analyzed separately to determine its individual contribution to the performance of dairy firms. This approach ensures a clearer understanding of which specific performance areas most significantly drive organizational success.

The conceptual framework above demonstrates the relationship between independent and dependent variables. The Independent variables (customer perspective, internal processes, innovation and learning, and financial perspective) influence the performance of the dairy firms. In other words, the financial performance and the growth of the dairy firms are influenced by the application of the balanced scorecard perspectives showing their importance to organizations.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter entails the design of the research, the study's targeted population, the technique of sampling to be used to arrive at a workable sample size, the research instruments, data collection methods, the research instruments' reliability and validity, and finally, how the data obtained was analyzed and presented. The chapter is divided into research design, population and sampling design, data collection method, research procedures, data analysis method, and chapter summary.

3.2 Research Design

The research design is grounded upon the positive research philosophy that advocates for objective and measurable data as well as establishing relationship between variables (Burkholder et al.,2020). Thus, a quantitative research method, descriptive design, and a cross-sectional approach were the most appropriate for the study. The method and design helped to establish and describe the relationship between independent and dependent variables. In this study, for instance, the descriptive design demonstrated whether a

relationship between balanced score card perspectives and firm's performance. However, one of the main limitations is that the descriptive design will demonstrate the relationship between variables but might not explain how or why such relationships exist (Burkholder et al., 2020). Nonetheless, the goal of this study is not to explain why such relationships exist, hence, the design remains appropriate.

3.3 Target Population

Creswell and Creswell (2023) defines the target population as the group of individuals that the researcher intends to use for data collection, analysis, and drawing conclusions. The target population for this study involved dairy firms operating in Kiambu County in Kenya. These firms were the unit of analysis, as the study aimed to assess organizational-level performance using selected Balanced Scorecard perspectives.

To obtain reliable and informed data on firm operations, the study targeted managers within each dairy firm as respondents. Managers were considered appropriate informants due to their strategic roles and understanding of firm performance indicators. Where multiple managers from the same firm were interviewed, their responses were aggregated to reflect the firm's collective performance across the measured dimensions.

Table 3.1

Target Population

Kiambu Dairy Firms	Managers
Gathiga Dairy Firm	15
Tilila Dairy	9
Ndumberi Dairies	13

New Mwalimu Dairy	8
Delight Dairy Farm	6
Guango Dairy Ltd	8
Brookside Dairy Ltd	16
Yummy Dairy Products	6
Ndumberi Dairy Farmers	12
Green Acre Dairy	6
Milk & Fruit Centre	7
Grand Total	106

Source: Kenya Dairy Board, 2022

3.4 Sampling Procedure

A sampling frame refers to the list of elements or the source from which the sample is drawn. As aforementioned, the target population were managers of various dairy firms from Kiambu County. To obtain the list, the researcher contacted the HR departments of the different dairy cooperatives in the county. A probability sampling technique was used. There is a need to enhance fair representation and generalization of the findings (Blair et al., 2023). Since the population of study was heterogeneous, a stratified random sampling technique was applied to obtain the participants from each category. Then, a simple random sampling technique was applied to get the final sample from the larger sample. The method minimizes sample bias and promotes validity of the findings.

A sample size refers to the subset of the population that participates in the study. To obtain the sample size, researcher applied the Slovin's Formula, which is:

$n = N / (1 + Ne^2)$, where 'n' is the sample size, 'N' is the population, and 'e' is the margin of error. The researcher estimated the confidence level to be 95%, which gives a margin of error of 5 percent or 0.05. Thus, the confidence level means that there is only a 5%

chance of being wrong, which increases the certainty of the findings. Thus, the following shows how the sample size is obtained:

$$n = 106 / (1 + 106 * (0.05 \times 0.05))$$

$$n = 106 / (1 + 106 * 0.0025)$$

$$n = 106 / (1 + 0.265)$$

$$n = 106 / 1.265$$

$n = 83.79$, which is approximately 84. Thus, the sample size for the study was 84 respondents.

Table 3.2

Sample Size

Kiambu Dairy Firms	Managers	Sample Size	Percentage (%)
Gathiga Dairy Firm	15	12	14.2
Tilila Dairy	9	7	8.5
Ndumberi Dairies	13	10	12.3
New Mwalimu Dairy	8	6	7.5
Delight Dairy Farm	6	5	5.7
Guango Dairy Ltd	8	6	7.5
Brookside Dairy Ltd	16	13	15.1
Yummy Dairy Products	6	5	5.7
Ndumberi Dairy Farmers	12	9	11.3

Green Acre Dairy	6	5	5.7
Milk & Fruit Centre	7	6	6.5
Grand Total	106	84	100.00

Source: Kenya Dairy Board, 2022

3.5 Instrumentation

A questionnaire was used for this study. It was developed based on research objectives. From the reviewed literature and theory, the researcher was able to develop determine the statements that measure each of the objectives. To determine how to frame the statements, the researcher took into consideration the ability of respondents to read and understand.

3.6 Pilot Study

To ensure that the instrument was appropriate for the study, a pilot study was conducted. Pilot study helped to enhance the validity and reliability of the study. A pilot study was conducted using a sample of 10 managers obtained randomly from Aspendos Dairy Ltd in Murang'a County. The company had 10 juniors and 3 senior managers. One way to promote reliability and validity of the study was through enhancing the sample validity (Tobi & Kampen, 2020). A reliable method of determining the sample size was applied. The results of the pilot study were used to test reliability. Greater consistency of the findings demonstrated a high reliability (Creswell & Creswell, 2022). Major deviance from the results of similar reviewed literature could raise reliability questions calling for the adjustment of the research instrument.

3.7 Validity and Reliability

3.7.1 Validity

Validity refers to the extent to which a research instrument (questionnaire in present study) measures exactly what it was designed to measure (Baškarada & Koronios, 2020). The goal is to enhance the credibility of the findings. To test the validity, the researcher used content validity and face validity measures. The content validity measures how well the research instrument captures all the relevant information about a given construct (Baškarada & Koronios, 2020), increasing the validity of the study. Thus, to enhance the content validity in this study, the researcher used the knowledge from the previous empirical studies and theories to determine the appropriate measures for each of the variables under the study. Face validity, on the other hand, tests the validity of the research instrument by looking at the measures and determining if they are appropriate for each of the constructs (Creswell & Creswell, 2020). The researcher achieved this by ensuring that statements seeking to measure each of the variables are valid based on reviewed studies and the knowledge of job design and employee performance obtained at work and in class.

3.7.2 Reliability

The results of the pilot study were also used to test reliability. This (reliability) refers to how a research method produces similar results multiple times. Greater consistency of the findings demonstrates high reliability (Burkholde et al., 2020). For this study, the Cronbach alpha was considered the most appropriate for measuring the reliability (internal consistency) of each of the variables. To test the internal consistency, the researcher calculated the Cronbach alpha using the SPSS. Cronbach alpha coefficient (α), which ranges between 0-1 (Creswell & Creswell, 2020) was used to test the reliability of each of the variables. According to Burkholde et al. (2020), a high Cronbach alpha value indicates

a high internal consistent. Thus, an alpha coefficient of 0.7 and above was used to demonstrate the reliability of each of the variables for this study.

3.8 Methods of Data Collection

Both drop, pick and online questionnaire were administered. Leveraging on Microsoft forms was seen as an advantage since it's faster and user friendly. The rationale for the choice of questionnaire is because of the selected research design. Questionnaires are cost effective, enhance uniformity, and are easier to administer (Creswell & Creswell, 2022). However, one limitation of questionnaires was the predetermined responses. Thus, respondents with different opinions were denied the opportunity to express it, especially because this study used a Likert Scale questionnaire. Also, the questionnaire was researcher developed. The research questions determined the items in the questionnaire. The validity and reliability of the questionnaire was enhanced by a pretest of the research instrument. This helped to determine whether the research instrument measures exactly what is what designed to measure.

3.9 Operational Definition of Variables

This section provided information regarding how each of the variables would be defined and measured. Furthermore, operational definition of variables (See Appendix 5), helped to ensure clarity and foster the replicability of this study.

3.10 Research Procedures

The researcher received an introduction letter from the University for permission to collect data. Furthermore, a consent form was issued. After the approval of the research proposal,

approval to conduct the study from the University's Institutional Review Board and National Commission for Science, Technology and Innovation (NACOSTI) was obtained. A letter to the human resource departments at the dairy cooperatives was then drafted. Positive feedback facilitated a pilot study involving 10 respondents. The actual study then followed this was after issuing consent forms to respondents and explaining to them the aim of the study. The ethical consent form was to assure respondents of confidentiality, protection of privacy, and their voluntary participation in the study. Respondents were informed of their right to withdraw from the study at any time. Additionally, respondents were encouraged to provide honest responses to enhance the credibility of the findings. Once the consent form is signed, a link to the questionnaire on survey monkey was provided and remained inactive after all the participants had responded while those that preferred tangible copies of the questionnaire were allowed to tick their responses.

3.11 Methods of Data Analysis

Data processing for the filled questionnaires was to clean the data for analysis. The cleaned data was coded and tabulated. A statistical package for social sciences (SPSS) version 27 was used to generate data. For this study, the researcher was interested in inferential statistics and descriptive statistics, with the focus being the Pearson correlation, which demonstrates whether the relationship between variables is statistically significant. A correlation value of above 0.6 demonstrated that there is a strong relationship between variables.

Data handling and management after research is vital to enhance the integrity of study, retrieval, and sharing. The research saved the findings on personal computer and google

cloud storage to prevent any damage, loss, or unauthorized access. The researcher aimed to enhance security of this research through electronic storage as well as creating backup files in case of losses or manipulation of data. Later, the goal is to have the research published in one of the international journals and to create a digital object identifier (DOI) so that the study is accessible to other scholars and anyone else who was interested in this research.

For this study, a regression model was applied as the empirical model. The equation hypothesized the relationship between the dependent and independent variables.

Below was the model:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \text{ where,}$$

Y= Dependent Variable (Firm Performance)

X1 = Independent variable one (Innovation and learning)

X2 = Independent variable two (internal business process)

X3= Independent variable three (Customer perspective)

X4= Independent variable four (Financial perspective)

β = the intercept

$\beta_1, \beta_2, \beta_3$ = The slope

e= term error

3.11.1 Diagnostic Tests

Normality Test

The Shapiro-wilk test was used to test for the normality of the data distribution of both the dependent and the independent variables. Normality is often an expected distribution and part of practically all statistical tests involving parameters. To assess the normality of the datasets, the results of the Shapiro-Wilk test were used and to interpret the results if the p-value obtained was greater than 0.05, then the data was normally distributed (Blair, et al., 2023). In this case, normality was confirmed; hence, the use of parametric tests in the subsequent analysis. The alternative hypothesis of the Shapiro-Wilk test was that the data was not normally distributed, while the null hypothesis was otherwise- these null hypotheses are to be rejected.

Multicollinearity Test (Tolerance – VIF)

To test the existence of the problem of multicollinearity among the independent variables, the VIF was employed. Another issue with regression analysis is that, in the event of multicollinearity where independent variables are correlated or offer high or a strong relationship, then the results become distorted. If the VIF value is more than 10, then multicollinearity is high. In this study, the VIF values were computed on each of the BSC perspectives about the financial, customer, internal process, learning, and growth to avoid high multicollinearity. If VIF values were less than 10, it attained the idea that most of the variables were not highly related to each other, was essential for the accuracy of the regression model.

Linearity Test

To check linearity in the current analysis, statistical tests for example, Ramsey RESET tests were employed. The Ramsey RESET test checks on the adequacy of the imposed linearity by testing if higher powers, quadratic or cubic of the independence variables are relevant in the regression equation. These higher ORDER terms explain the possibility of interaction effect between independent and dependent variables. A significant F-value for these terms provides evidence that the relationship between the variables could be other than linear, thus the best model to fit the data is nonlinear.

Autocorrelation Test

This problem was investigated with the Durbin-Watson test to check for autocorrelation among the residuals of the model. Durbin and Watson, 1951 noted autocorrelation, especially in time series data, results in a biased estimate of the parameters of the model mainly because residuals are correlated. Their results further indicate that a Durbin-Watson statistic value closer to 2 indicates no autocorrelation. A value below 1 or above 3 would suggest evident autocorrelation which was tested in this study. From the output, we observed that the value of Durbin- Watson statistics is acceptable and hence we can conclude that there is no evidence of autocorrelation in the residual.

3.12 Ethical Considerations

The study involves human subjects explaining why it was fundamental to adhere to the research ethical principles of consent, privacy, confidentiality, and the protection of the

respondents. Prior to data collection, the researcher obtained permission from the University's Institutional Ethics

Review Committee and National Commission for Science, Technology and Innovation (NACOSTI). To ensure informed consent, the aim of the study, its benefits to various stakeholders, the role of participants in the study, and the scope of information was provided to the respondents. Respondents were issued with a written consent form indicating that their participation was voluntary and that they can withdraw from the study at any time, that they do not have to respond to all questions, and that their privacy and confidentiality is protected. All participants were required to sign the consent form. Researcher also explained the aim of the study and its significance to the participants. In addition, the researcher adhered to ethical principles through objective interpretation of the findings and by acknowledging information obtained from other authors.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter offers an analysis, clarification, and summary of the data. This chapter contains the respondents' background data, analytical findings based on the goals of the study, and descriptive and inferential statistics related to the research findings. The results are necessary for a thorough evaluation of the study's analysis of factors affecting the influence of balance score card perspectives on performance of dairy firms. The findings in chapter are presented in tables and figures below.

4.2 Response Rate

The researcher distributed 84 questionnaires to the intended respondents and 75 were returned fully completed with the intended questions answered.

Table 4.1 displays the study's response rate.

Table 4.1:

Response Rate

Questionnaires	Frequency	Percentage
Response	75	89.3
Non-response	9	10.7
Total	84	100

Source: Research Data (2024)

From Table 4.1: Of the 84 questionnaires that were distributed, 75 of them were accurately completed and returned, accounting for 89.3 percent of the total. 9 questionnaires were not returned constituting 10.7% of the total questionnaires. Mugenda and Mugenda (2008) state that a 50% response rate is sufficient for reporting and analysis, a 60% rate is remarkable, and a 70% rate or more is exceptional. The study's results showed that the response rate was high.

4.3 Pilot Test Results

This section presents the findings of the research instrument's validity and reliability test results as shown below:

4.3.1 Reliability Test Results

The researcher performed a reliability test and used Cronbach's Alpha to gauge internal consistency in reliability. The results are shown in Table 4.2. The minimum value used to gauge the reliability test is 0.5<a>.

Table 4.2:

Reliability Test Results

Variable	No. of items	Cronbach's Alpha Results	Recommendation
Innovation and learning	6	.724	Reliable
Internal business processes	6	.808	Reliable
Customer perspective	6	.754	Reliable
Financial Perspective	6	.727	Reliable
Firm's performance	6	.817	Reliable

Source: Research Data (2024)

According to Table 4.2, the firm's performance had the highest reliability coefficient of 0.817, internal business processes 0.808, customers' perspective with a reliability coefficient with 0.754, financial perspective 0.727, and lastly innovation and learning with 0.745. According to Creswell and Creswell (2022), a scale's internal consistency can be inferred with a Cronbach's alpha of 0.6 or higher. Therefore, all variables' alpha reliability coefficients were found to be greater than 0.7, indicating that the 0.7 threshold had been met, and the questionnaire was reliable. The minimum value used to gauge the reliability test is 0.5<a>.

A pilot test was used to verify the validity of the data. A target of 8 respondents was established for the study. Over one day and face-to-face validity at the various outlets, this response was reached. Based on the results of the pilot study, it was determined that the different scales and the questionnaire were designed to measure the objectives Ombuna et al. (2020) every item was understandable and matched the dimension that it was meant to

evaluate, therefore, valid. In addition, the validity of the instrument was achieved through the supervisor's approval and judgement.

4.4 Demographic Analysis

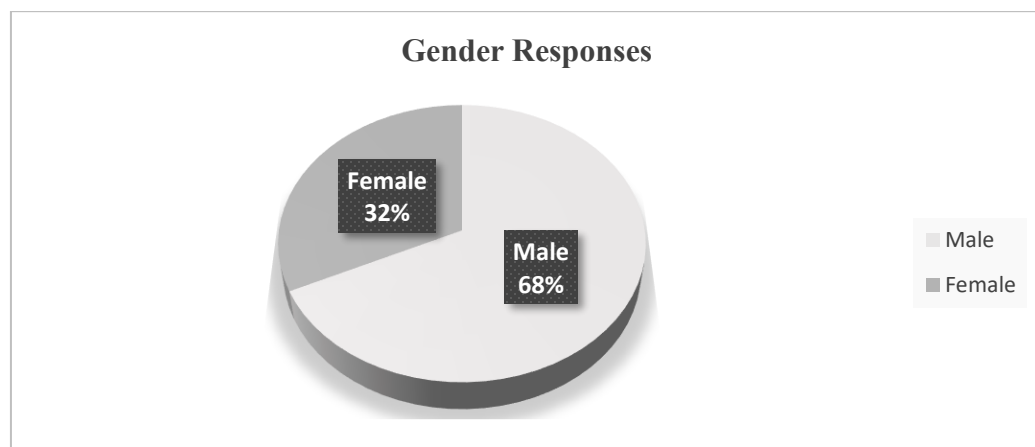
The respondents' demographic information is presented in this section. It provides valuable information about the characteristics of the sample being studied. The outcomes of the questionnaire's first section. The age group, gender, degree of education, and length of service are the demographic characteristics. Analyzing demographic data helps in explaining workforce diversity, decision-making, staff acquisition, and advancing organizational outcomes (Rapitasari et al., 2021).

4.4.1 Gender of the Respondents

The genders of the various respondents were the researcher's focus. The results are displayed in Figure 4.1.

Figure 4.1:

Gender of Responders



Source: Research Data (2024)

As can be seen from Figure 4.1, most of the respondents were men. 32.0% of those surveyed were women, and 68.0% of respondents were male. The 2010 Kenyan Constitution mandates gender equality in all organizations. This finding demonstrates that the dairy firms have an information equity ratio of 1/3 and maintain a gender balance within their daily operations.

4.4.2 Age Bracket of the Respondents

The researcher determined the age range of the respondents. The results are shown in Table 4.3.

Table 4.3:

Age of Respondents

Bracket	Frequency	Percentage
25-35 Years	12	16.0
35-45 Years	31	41.3
45-55 Years	19	25.3
55-65 Years	9	12.0
Above 65 Years	4	5.3
Total	75	100

Source: Research Data (2024)

According to Table 4.3, 41.3 percent of participants were aged between 35 and 45, while 25.3% fell between 45 and 55 years old. 16.0 percent fell between 25 and 35 years of age 12.0 percent fell between 55 and 65 years old and lastly 5.3% of the population is over the age of 65, People of various ages took part in the study as a result, and the outcomes were clear-cut. The age range of the bulk of responders was between 35 and 45. This age group (45–55) had a good representation of individuals. This demonstrates that members of the various groups are included in the organization's operations and activities. This lends credence to the assertion made by Jiménez-Jiménez and Sanz-Valle (2020) that a person's age and degree of experience greatly influence their value in the workplace. The investigator, the investigator was content with the information provided to support the objectives of the study.

4.4.3 Level of Education

The researcher was eager to find out how educated the responders were. The results shown in Figure 4.2.

Figure 4.2

Level of Education

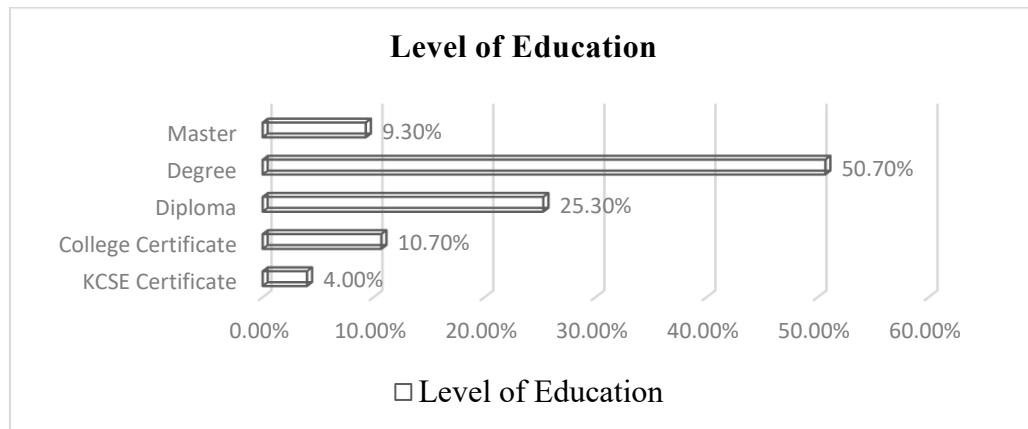


Figure 4.2 Level of Education

Source: Research Data (2024)

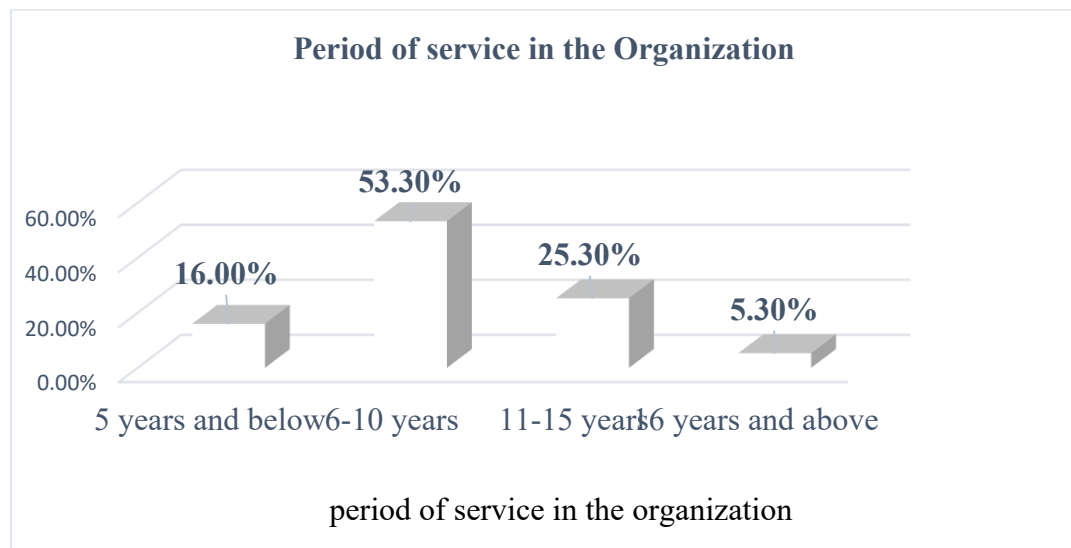
From Figure 4.2 it is revealed that most responders (50.7%) held a bachelor's degree, followed by a diploma (25.3%), 10.7% had a certificate, masters 9.3% and 4.1 percent had a KCSE certificate. Consequently, the great majority of respondents were educated, making them perfect sources of reliable information and data, ensuring the study's objective. Those with degrees and diplomas made up the bulk of survey participants. This demonstrates their comprehension of the objectives of the study, their ability to provide reliable data, and their familiarity with the practices and workings of dairy firms.

4.4.4 Period of service in dairy firms

The investigator aimed to ascertain the period of service at dairy firms. Results are summarized in Figure 4.3.

Figure 4.3

Period of Service in dairy firms



Source: Research Data (2024)

Majority of respondents, or 53.3%, were shown in Figure 4.2, had been employed by dairy firms for 6 and 10 years, 16.0% had been employed for 5 years and below, 25.3% had been employed for 11 and 15 years, and 5.3% had been employed for 16 years and above. In summary, the concentration of employees with 6 to 10 years of employment in the dairy firms suggests positive aspects related to retention, experience, and potential challenges that organizations should be mindful of in terms of employee integration and succession planning. Thus, the rationale for requiring the period of service was to also get information about employees' experience and the ability of companies to retain employees.

Some of the considerations for this age bracket are as follows. The talent management implication of such a trend for dairy firms is that there is need to encourage career advancement for this age group in the firms. It also explains the need to keep experienced employees within the organization at the same time employ young generations to enhance knowledge combination and allow for the usual expansion of organizations. By way of

conclusion, workforce demographics and, particularly, age and experience are innovative factors that play an important role in such outcomes as workforce retention, as well as long-term organizational performance.

4.4.5 Department of the Respondents

The researcher determined the department of the respondents. The results are shown in Table 4.4.

Table 4.4:

Department of Respondents

Bracket	Frequency	Percentage
Finance & Accounting	12	16.0
HR & Adm.	9	12.0
Sales & Marketing	19	25.3
Customer Service	31	41.3
Total	75	100

Source: Research Data (2024)

According to Table 4.4, 41.3 percent of participants worked in the customer service department, while 25.3% worked in the sales and marketing department. 16.0% worked

in the finance and accounting department, 12.0% worked in the HR & ADM. department, People of various departments took part in the study as a result, and the outcomes were clear-cut. The distribution of participants across departments provides valuable insights into the organizational structure, potential focus areas, and the significance of the customer service department in the study outcomes. Analyzing data with consideration for departmental differences contributed to more nuanced and actionable findings. By collecting data from various departments, a comprehensive perspective on the organization's operations, performance, and challenges was obtained. This allows for a more holistic understanding of the organization, rather than focusing on isolated departmental views.

4.5 Descriptive Analysis

This section provides descriptive statistics for the independent variables of firms' performance is the dependent variable. The variables analyses are presented hereafter. The 5-likert scale was used in the rating as 1- strongly disagree, 2-disagree, 3- neutral, 4- agree and 5- strongly agree.

4.5.1 Innovation and Growth

The study sought to determine the effect of Innovation and Learning at dairy firms' performance. The outcomes are shown in Table 4.5.

Table 4.5:*Results of Descriptive Statistics for Innovation and Growth*

Statement	Mean	Std. D
The company consistently embraces and integrates new technologies to enhance its products.	4.208	1.034
The commitment to technological innovation has positively impacted the company's overall performance and market position	3.458	1.538
The company actively supports initiatives that promote a culture of continuous innovation among its workforces.	3.611	1.552
There is a receptiveness to exploring and implementing novel approaches to meet evolving customer needs.	3.889	1.658
Employees feel encouraged to share unconventional ideas, and the company is responsive to such contributions.	4.042	1.803
The company encourages calculated risk-taking in the pursuit of innovation and growth.	3.847	1.667
Overall Mean	3.843	

Source: Research Data (2024)

From Table 4.5, on whether the dairy firms consistently embrace and integrate new technologies to enhance their products as indicated by (M=4.208, SD= 1.034). Employees feel encouraged to share unconventional ideas, and the company is responsive to such contributions as shown by a (M= 4.042, SD= 1.803). There is a receptiveness to exploring and implementing novel approaches to meet evolving customer needs indicated an overall (M= 3.889, SD= 1.658). The company encourages calculated risk-taking in the pursuit of innovation and growth as shown by a (M= 3.847, SD= 1.667). The firms actively support initiatives that promote a culture of continuous innovation among its workforce as shown by a (M=3.611, SD= 1.552). The commitment to technological innovation has positively

impacted on the company's overall performance and market position as indicated by (M= 3.458, SD= 1.538). The overall mean of adoption of big data was (M= 3.843).

This implied that innovation and learning have a significant effect on dairy firm in Kiambu. There is a receptiveness to exploring and implementing novel approaches to meet evolving customers. The firms encouraged calculated risk-taking in the pursuit of innovation and growth. The dairy firms consistently embrace and integrate new technologies to enhance their products. This was in line with the study done by Karisa and Wainaina (2020), from the findings, it is apparent that innovation and learning perspectives are fundamental in measuring and determining the performance of an organization. Similarly, Namin and Ebrahimpour (2020) highlighted the positive impact of technology adoption on performance, showcasing how innovation initiatives reduced wastage and enhanced service quality. This supports the current finding that technological innovation positively influences the company's market position

4.5.2. Internal Business Processes

The study sought to establish the effect of Internal Business Processes as a factor affecting adoption of big data at the dairy firms. The results are presented in Table 4.6.

Table 4.6

Descriptive Statistics for Internal Business Processes

Statement	Mean	Std. D

The company provides effective training programs that contribute to the professional development of employees	3.847	.988
Employees have access to ongoing training opportunities to enhance their skills and knowledge.	4.458	.963
Employees feel that their contributions are accurately assessed during the appraisal process.	3.778	1.324
The company prioritizes efficiency in its day-to-day operations, resulting in streamlined workflows.	4.194	1.421
Employees have access to the necessary tools and resources to perform their duties efficiently.	3.875	1.020
The company effectively communicates changes in policies, procedures, or organizational structure to employees.	4.250	1.461
Overall Mean	4.067	

Source: Research Data (2024)

From Table 4.6 on whether employees have access to ongoing training opportunities to enhance their skills and knowledge as indicated by (M= 4.458, SD= 0.963). The company effectively communicates changes in policies, procedures, or organizational structure to employees, it indicated an overall (M= 4.250, SD= 1.461). The company prioritizes efficiency in its day-to-day operations, resulting in streamlined workflows as shown by a (M= 4.194, SD= 1.421). The company provides effective training programs that contribute to the professional development of employees at (M= 3.847, SD= .988). Employees have

access to the necessary tools and resources to perform their duties efficiently as shown by (M= 3.875, SD= 1.020). Employees feel that their contributions are accurately assessed during the appraisal process as shown by (M= 3.778, SD= 1.324). The perceived usefulness of big data had an overall mean of 4.067.

This implied that the internal business process has a significant effect on the dairy firms in Kiambu. The company provides effective training programs that contribute to the professional development of employees. The company prioritizes efficiency in its day-to-day operations, resulting in streamlined workflows. Employees have access to the necessary tools and resources to perform their duties efficiently. This collaborated with the study done by Mądra-Sawicka and Paliszkiewicz (2020) established that the focus of internal business processes should on improving customer satisfaction, internal business process gives a business the competitive edge.

4.5.3 Customer Perspective

The study sought to determine the effect of customer perspective on employee performance at dairy firms. The results are reported in table 4.7.

Table 4.7:

Descriptive Statistics Results for Customer Perspective

Statement	Mean	Std. D
The quality of products provided by the company has noticeably improved over time.	4.292	.941

The consistency in quality has increased, leading to a more satisfying experience for customers	3.861	1.387
The company has demonstrated a commitment to meeting delivery deadlines consistently.	3.819	1.325
They have experienced a noticeable improvement in the punctuality of their product/service deliveries.	3.569	1.382
They have noticed and appreciate the high standards of hygiene maintained in the delivery of products	3.750	1.172
The company's commitment to hygiene and cleanliness is evident in all interactions and transactions.	3.792	1.510
Overall Mean	3.847	

Source: Research Data (2024)

From Table 4.7, on whether the quality of products provided by their company has noticeably improved over time at ($M = 4.292$, $SD = .941$). The consistency in quality has increased, leading to a more satisfying experience for customers as shown by ($M = 3.861$, $SD = 1.387$). The dairy firms have demonstrated a commitment to meeting delivery deadlines consistently as shown by a ($M = 3.819$, $SD = 1.325$). The company's commitment to hygiene and cleanliness is evident in all interactions and transactions at ($M = 3.792$, $SD = 1,510$). They have experienced a noticeable improvement in the punctuality of their product/service deliveries as shown by ($M = 3.750$, $SD = 1.172$). They have experienced a noticeable improvement in the punctuality of their product/service deliveries at ($M =$

3.569, SD= 1.382). The overall mean of the innovative culture was 3.847 which was above the mean score of 3.

This implies that customer perspective has a significant effect on employ performance at the dairy firms in Kiambu. The consistency in quality has increased, leading to a more satisfying experience for customers. They have experienced a noticeable improvement in the punctuality of their product/service deliveries. The company's commitment to hygiene and cleanliness is evident in all interactions and transactions. This is corroborated by a study done by Ganesh at al. (2021) from the studies, a focus on customer perspectives strategic objectives plays a fundamental role in improving the performance of a firm.

4.5.4 Financial Perspective

The study sought to determine the effect of financial Perspective on a firm's performance at dairy firms. The results are reported in table 4.7.

Table 4.8:

Descriptive Statistics Results for Customer Perspective

Statement	Mean	Std. D
The organization has met/exceeded its profit targets.	4.194	1.421
The organization effectively controls and manages operating costs to support financial objectives.	3.889	1.658
The organization maintains a strong financial position	4.042	1.803

The organization effectively communicates its financial performance to shareholders	4.458	.963
The organization effectively manages its debt levels to ensure long-term sustainability.	3.819	1.325
Employees are satisfied with the organization's dividend payouts and the creation of shareholder value.	3.750	1.172
Overall Mean	4.025	

Source: Research Data (2024)

The findings in Table 4.8 reveal a generally positive picture of the organization's financial performance and management practices. The organization has excelled in meeting or surpassing its profit targets, as reflected in a mean score of 4.194 with a standard deviation of 1.421. This suggests a consistent and commendable track record in achieving financial goals. While effective control of operating costs ($M=3.889$, $SD.=1.658$) and maintaining a strong financial position ($M=4.042$, $SD.=1.803$) are areas where the organization performs well, there is room for improvement in managing debt levels for long-term sustainability ($M=3.819$, $SD.=1.325$). Notably, the organization shines in communicating its financial performance to shareholders, earning a high mean score of 4.458 with a low standard deviation of 0.963, indicating a robust and precise communication strategy. Employee satisfaction with dividend payouts and shareholder value creation is relatively positive ($M3.750$, $SD.=1.172$), contributing to the overall favorable mean score of 4.025. This implied that the organization demonstrates strengths in profitability and

communication, while targeted improvements in debt management could further enhance its long-term financial sustainability.

The findings from the survey align with Fatihudin's perspective on financial performance as a crucial indicator of resource management and control capabilities within a company (Fatihudin, 2020). The survey's focus on profit targets, operating cost management, financial position maintenance, communication, and debt management directly corresponds to the elements highlighted by Fatihudin. The reported mean scores and standard deviations reflect the organization's proficiency in these financial aspects, emphasizing the significance of these factors in evaluating the company's overall health. The survey results essentially validate the importance of assessing financial performance, as it serves as a comprehensive measure of a company's financial well-being, supporting Fatihudin's assertion (Fatihudin, 2020).

4.5.5 Firm`s Performance

The study sought to determine the effect of selected BSC perspectives on performance of dairy firms. The results are as presented in Table 4.9.

Table 4.9:

Results of Descriptive Statistics for Firm Performance

Statement	Mean	Std. D
They maintain a commitment to timely order processing and delivery to meet customer expectations	4.486	.787

Their company consistently delivers high-quality products/services to meet customer expectations.	3.181	1.673
Customer feedback is actively sought and utilized to enhance their products/services.	3.278	1.540
Profitability is a key consideration in decision-making processes and strategic planning.	3.264	1.661
Continuous improvement initiatives are in place to address any identified delays or inefficiencies.	3.597	1.725
The company actively explores opportunities for business expansion and diversification.	3.806	1.488
Overall Mean	3.602	

Source: Research Data (2024)

From Table 4.9, on whether they maintain a commitment to timely order processing and delivery to meet customer expectations it indicated an overall (M= 4.486, SD= 0.787). The company actively explores opportunities for business expansion and diversification indicated a (M= 3.806, SD= 1.488). Continuous improvement initiatives are in place to address any identified delays or inefficiencies registered a (M= 3.597, SD= 1.725). Customer feedback is actively sought and utilized to enhance their products/services agreed (M= 3.278, SD= 1.540). Profitability is a key consideration in decision-making processes and strategic planning agreed with (M= 3.264, SD= 1.661). The company actively explores opportunities for business expansion and diversification agreed with (M= 3.181, SD= 1.673). The firm’s performance had an overall mean of (M= 3.602).

In summary, the implications highlight the company's strengths and areas for improvement across various aspects of its operations. Addressing the identified areas of improvement could contribute to enhanced overall performance and competitiveness in the market. Serhan and Serhan, (2021) identified business expansion and customer satisfaction as key metrics of firm performance, emphasizing the importance of aligning operations with customer expectations, which resonates with the company's focus on timely delivery and customer feedback. Similarly, Chidozie and Anayochukwu, (2020) found that profitability and business growth, both financial and non-financial metrics, are vital in measuring firm performance.

4.6 Diagnostics Tests Results

This section presents the diagnostics test of the independent and dependent variable featuring on Normality Test, Multicollinearity Test, Linearity Test-and Autocorrelation Test as follows.

4.6.1 Normality Test

The researcher sought to test the normality of the data distribution of both the dependent and the independent variables. The results are presented in Table 4.10.

Table 4.10:

Normality Test

Kolmogorov-Smirnov ^a			Shapiro-Wilk		
Statistic	df	Sig.	Statistic	df	Sig.

Innovation and Learning	.284	75	.120	.710	75	.410
Internal Business Processes	.263	75	.230	.819	75	.500
Customer Perspective	.354	75	.320	.724	75	.110
Financial Perspective	.403	75	.512	.585	75	.060
Firm Performance	.322	75	.700	.611	75	.270

a. Lilliefors Significance Correction

Test results for normality of data drawn from certified dairy firms in Kiambu County denote that all measured variables, which include Innovation and Learning, Internal Business Processes, Customer Perspective, Financial Perspective as well as Firm Performance are normally distributed. The Kolmogorov-Smirnov and Shapiro-Wilk tests gave $p < 0.05$, which is significant across the variables, this implies that the null hypothesis that stated that the data was normally distributed cannot be rejected. In particular, the p-values of the Kolmogorov-Smirnov test were from 0.120 to 0.700, and the p-values of the Shapiro-Wilk test varied from 0.060 to 0.500. As the obtained p-values are higher than the standard value of 0.05, it indicates that the data of each of the variables is normally distributed.

These results suggest that the conventional approaches of statistical measures that emanate from normality hold for the data from the dairy firms in Kiambu County. The nonsignificant deviations from normality in all measured variables enhance the confidence in additional statistical analysis and conclusions that will be made thereon. Thus, it means such researchers can go ahead and perform parametric analysis, including regression or an ANOVA test, without worrying about normality-violating data.

4.6.2 Multicollinearity Test

The researcher sought to test for the multicollinearity of the data distribution of both the dependent and the independent variables. The results are presented in Table 4.11.

Table 4.11

Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
Innovation and Learning	.568	1.760
Internal Business Processes	.870	1.149
Customer Perspective	.580	1.724
Financial Perspective	.406	2.462

Source: Research Data (2024)

The multicollinearity test conducted on the certified dairy firms in Kiambu County indicated by variance inflation factors (VIF) presented in Table 4.11 revealed that all the variables have $VIF < 10$. The VIF values came between 1.149 and 2.462 while the tolerance values came between 0.406 and 0.870. Werlang and Rossetto (2020) said that multicollinearity is a threat if the VIF is greater than 10 or if tolerance is below 0.10. When the researcher examined the multicollinearity, all the VIF values were less than 10 and the tolerance more than 0.1 and thus concluded that there is no issue of multicollinearity in this data set. These results of analysis under consideration imply that the independent variables – Innovation and Learning, Internal Business Processes, Customer Perspective, and Financial Perspective are not closely related to each other and are, thus, suitable for

use in the regression model. This absence of multicollinearity is important as it reduces the complexity of the model, and we get cleaner interpretations of each of the Balanced Scorecard perspectives' importance in firm performance (Serhan & Serhan, 2020). Hence, the study can be confident that the results of the regression analysis will not be prejudiced by multicollinearity.

4.6.3 Autocorrelation Test

The researcher sought to test for the Autocorrelation Test of the data distribution of both the dependent and the independent variables. The results are presented in Table 4.12.

Table 4.12

Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.786 ^a	.618	.596	.4940	1.603

a. Predictors: (Constant), Financial Perspective, Internal Business Processes, Customer Perspective, Innovation and Learning

b. Dependent Variable: Firm Performance

Source: Research Data (2024)

The Durbin-Watson statistics obtained from the autocorrelation test, for this study among certified dairy firms in Kiambu County as presented in Table 4.12 was 1.603. This value lies within the boundaries of 1.5-2.5, the result indicating that there is no high level of autocorrelation between the residuals of the regression model. Turner (2020) explains that Durbin-Watson statistics of 0 or 4 means that the residuals are correlated with earlier

values, which is undesirable. That points to the ability of the model to conform to fixed assumptions such as the independence of errors is pointed to by the Durbin-Watson value within the acceptable range.

In this study, the test for serial correlation gives Durbin-Watson statistics of 1.603; thus, the regression model used here to test hypothesis and the BSC model assessment of firm performance is reliable. Lack of autocorrelation increases the reliability of the regression findings so that the effect of Innovation and Learning, Internal Business Processes, Customer Perspective, and Financial Perspective on the performance of the firm can be determined from the model. These insights are significant because they demonstrate that the established patterns pertain to the current situation, without being influenced by time dependencies. Remarkably, only the most current manifestations of such dependencies are considered valid in the study (Tibbs & Langat, 2020; Tobi & Kampen, 2020).

4.6.4 Linearity Test

The researcher sought to test for the linearity test of the data distribution of both the dependent and the independent variables. The results are presented in Table 4.3.

Table 4.13

Linearity Test

			Sum of Squares	df	Mean Square	F	Sig.
Firm Performance * Innovation and Learning	Between Groups	(Combined)	20.160	4	5.040	14.365	.000
		Linearity	11.225	1	11.225	31.993	.000
		Deviation from Linearity	8.936	3	2.979	8.490	.000
	Within Groups		24.560	70	.351		

	Total		44.720	74			
Firm Performance * Internal Business Processes		(Combined)	21.005	4	5.251	15.500	.000
	Between	Linearity	6.014	1	6.014	17.752	.000
	Groups	Deviation from Linearity	14.991	3	4.997	14.750	.000
	Within Groups		23.715	70	.339		
	Total		44.720	74			
Firm Performance * Customer Perspective		(Combined)	31.199	4	7.800	40.380	.000
	Between	Linearity	21.840	1	21.840	113.06 9	.000
	Groups	Deviation from Linearity	9.359	3	3.120	16.151	.000
	Within Groups		13.521	70	.193		
	Total		44.720	74			
Firm Performance * Financial Perspective		(Combined)	19.297	3	6.432	17.964	.000
	Between	Linearity	16.434	1	16.434	45.896	.000
	Groups	Deviation from Linearity	2.863	2	1.431	3.998	.023
	Within Groups		25.423	71	.358		
	Total		44.720	74			

Table 4.13 shows that it is possible to build a linear relationship between firm performance and the four perspectives of the BSC: innovation and learning perspective, internal business process perspective, customer perspective, and financial perspective. For each of the perspectives, it was also determined that the linearity test had an F-value that was greater than the F-critical value and the p-value was less than 0.05. Hence, the linear model was a good fit for the data. For each perspective, the linearity test showed that the linear model provided a good fit to the data, as evidenced by the significant F-values and low p-values ($p < 0.05$) across all tested variables. Specifically, the "Linearity" results for innovation and learning ($F = 31.993$, $p = 0.000$), internal business processes ($F = 17.752$, $p = 0.000$), customer perspective ($F = 113.069$, $p = 0.000$), and financial perspective ($F =$

45.896, $p = 0.000$) all demonstrated that linear relationships existed between these variables and firm performance.

Additionally, the result yielded by the “Deviation from Linearity” F-values allays also pointed out that results of all perspectives were significant at the 0.05 level, for the non-linear component was found to exist and they play a role in the firm performance). It was found that all four perceived value components had significant interaction effects with product-innovation attributes on the three VOI perspectives. The non-linear effects were found significant and particularly manifested in the customer perspective ($F = 16.151$, $p = 0.000$) and financial perspective ($F = 3.998$, $p=0.023$), though the application of linear models provided reasonable fit showing that other dynamics at play could not.

The analytical results imply that even if the BSC perspectives can be fitted by a linear model the effects of these performances show non-linear interactions. Dairy managers should begin to think about the inclusion of both linear and non-linear components into the various performance management systems in a bid to reflect the various dimensions of firms’ performance. This approach is important in areas like dairy farming because these factors of customer satisfaction, stakeholders’ narrowly or broadly defined, or finances are likely to have more complex, curved relationships.

In conclusion, the present research also supports the two hypotheses which suggest that non-linear as well as linear investigations should be conducted when examining performance-influencing factors in firms and organizations. The findings indicate that, although the linear analyses are informative, other important non-linear effects could be obscured. More detailed future research in this area could employ polynomial regression

or machine learning as techniques for dealing with non-linear variables that influence performance in the dairy sector, in Kiambu County.

4.6 Inferential Analysis

This section presents the inferential analysis of the study. This includes the analysis of correlation, regression coefficient, and analysis of variance between the balanced scorecard perspectives on the performance of Dairy Firms in Kiambu County.

4.6.1 Correlation Analysis Results

The study's objectives were to determine whether there was a relationship between balance scorecards and the performance of Dairy firms in Kiambu County. The results are shown below.

4.6.1.1 Innovation and Learning on Firm's Performance

The study's objective was to determine whether there was a relationship between innovation and learning and firm performance of certified food firms. The results are as shown in Table 4.14.

Table 4.14:

Correlation between Innovation and Firm's Performance

	Innovation & Learning	FIRM's Performance
Pearson Correlation	1	.850**
Sig. (1-tailed)		.000

N	75	75
Pearson Correlation	.850**	1
Sig. (1-tailed)	.000	
N	75	75

Source: Research Data (2024)) **. Correlation is significant at the 0.01 level (1-tailed).

The Pearson correlation analysis revealed a highly significant positive correlation ($r = .850$, $p < .01$) between Innovation & Learning (INN) and Firm Performance (FIRM) in the sample of 75 firms. This indicates a robust and substantial relationship between innovation and learning activities within the firm and its overall performance. The correlation coefficient of .850 suggests a strong positive linear association, implying that as innovation and learning initiatives increase, firm performance tends to improve proportionally. The statistical significance ($p < .01$) underscores the reliability of this relationship. These findings underscore the strategic importance of fostering a culture of innovation and continuous learning within organizations, as they appear to be crucial drivers of enhanced overall firm performance. The results contribute valuable insights for managerial decision-making, emphasizing the potential benefits of prioritizing innovation and learning initiatives in corporate strategies.

Results indicated a strong correlation between innovation and the performance of the dairy firms in Kiambu County ($r=.85$). The implication of the findings was that by promoting a culture of innovation, dairy firms succeeded in enhancing efficiency, quality, increased revenue, and efficiency. These positive performance attributes are fundamental, especially because they foster a firm's competitive advantage (Sha et al., 2020). The result of this research is similar to the previous empirical studies that also indicated a strong correlation between an innovative culture and robust performance of an organization (Gupta et al., 2021; Shah et al., 2020). From these studies, firms that adopted technology had better performance compared to those using traditional methods of production. With the increased challenges in businesses, firms need to create a culture that favors use of relevant innovations that increase their performance and competitive edge (Kaplan & Norton, 2014). Such firms are able to attain continuous improvement, generate more revenue, make fast and better decisions, and foster customer satisfaction through improved interactions (Gupta et al, 2021; Shah et al., 2020). Therefore, from the current and previous studies, it is apparent that firms seeking to increase their performance must embrace innovation and learning. The dairy firms in Kiambu County should embrace innovative culture and use appropriate technologies that will help the firms remain competitive and generate more revenue through efficiency.

4.6.1.2 Internal Business Processes on Firm's Performance

The study's objective was to determine whether there was a relationship between internal business processes and the performance of the Dairy Firm. The results are shown in Table 4.15.

Table 4.15:*Correlation of Internal Business Process and Firm's Performance*

		Internal business process	FIRM's Performance
Internal Business processes	Pearson Correlation	1	.530**
	Sig. (1-tailed)		.000
	N	75	75
FIRM's performance	Pearson Correlation	.530**	1
	Sig. (1-tailed)	.000	
	N	75	75

Source: Research Data (2024)) **. Correlation is significant at the 0.01 level (1-tailed).

The results in Table 4.11 reveal a statistically significant positive correlation between Internal Business Processes and Firm Performance ($r = .530$, $p < .01$) based on the research data from 2024. This indicates a moderate and robust relationship between the effectiveness of internal business processes and the overall performance of the 75 employees under investigation. The correlation coefficients of .530 for both variables suggest a strong positive linear association, emphasizing the importance of well-managed internal processes for achieving favorable firm outcomes. The significance level of .01 underscores the reliability of this correlation. These findings imply that organizations focusing on optimizing and enhancing their internal business processes are likely to experience improved overall performance. This information is valuable for managerial decision-making, urging a strategic emphasis on the refinement and efficiency of internal processes to positively impact firm performance.

A significant relationship between international business process perspective and dairy firm performance was established ($r=.53, p<.01$). From the findings, a focus on improving customer services, cost management, reducing time to the market, improving resource utilization, and optimizing the supply chain management contributed to the performance of the dairy firms in Kiambu county. Paying attention to the general improvement of the internal business processes has also been attributed to better performance by other researchers (Hameed et al. 2021; Maheshwari et al., 2020; Okorie, 2021). The findings of these empirical studies indicated that firms needed to increase efficiency through innovation, cut the cost of operation, focus on strategies that improve customer services, and improve quality (Hameed et al. 2021; Okorie, 2021). Furthermore, firms must have objectives and measures for each of the internal business processes (Maheshwari et al., 2020). The goal is to track the attainment of the objectives to ensure that a firm's general performance is enhanced. Thus, while it is fundamental that dairy firms in Kiambu implement the internal business process, it is equally important to establish realistic and measurable objectives. Generally, dairy firms must embrace cost-cutting strategies and improve customer relations through effective communication channels to improve performance.

4.6.1.3 Customer Perspective on Firm's Performance

The study's objective was to determine whether there was a relationship between customer perspective and firm performance of certified food firms. The results are shown in Table 4.16.

Table 4.16:*Correlation between Customer Perspective and Firm's Performance*

		Customer Perspective	FIRM's Perspective
Customer Perspective	Pearson Correlation	1	.617**
	Sig. (1-tailed)		.000
	N	75	75
Firm's Perspective	Pearson Correlation	.617**	1
	Sig. (1-tailed)	.000	
	N	75	75

Source: Research Data (2024) **. Correlation is significant at the 0.01 level (1-tailed).

The findings presented in Table 4.16 underscore a highly significant positive correlation between Customer Perspective and Firm Perspective, as evidenced by the robust Pearson correlation coefficients of .617 ($p < .01$) for both variables, based on research data in Table 4.12. This implies a strong and positive linear relationship between the customer-focused strategies adopted by firms and their overall perspective. The statistical significance at the 0.01 level reinforces the reliability of this correlation. The results suggest that organizations prioritizing customer perspectives in their operations and decision-making are likely to experience enhanced overall performance. These insights are crucial for strategic decision-makers, emphasizing the importance of customer-centric approaches in fostering positive outcomes for firms. The correlation findings in this study offer valuable guidance for businesses seeking to optimize their performance by recognizing and incorporating the customer perspective into their strategic initiatives.

Generally, the correlation coefficient ($R=0.866$) obtained from regression analysis showed a strong and positive relationship between the balance scorecard perspectives and firm's

performance. The implication of the findings is that dairy firms in Kiambu County should promote innovation, improve their business processes, enhance customer satisfaction, and foster efficiency to increase revenue. These results are similar to previous empirical studies (Zakari & Ibrahim, 2021), who also established a strong link between balance scorecard perspectives and firms' performance in terms of increased revenue, improved quality, enhanced customer satisfaction and loyalty, and a significant reduction in wastage of resources. Specifically, the research found a robust relationship between customer perspectives and dairy firm's performance (.617). This implied that by engaging in strategies that improved customer relations and satisfaction, dairy firms would be able to attract and retain customers. Such strategies include a focus on improved quality of products, high standards of hygiene, timely delivery, and better prices. Similarly, other studies (Zakari and Ibrahim, 2021) showed how excellent customer services, especially timely and reliable delivery of products, quality, and favorable prices culminated in customer satisfaction, loyalty, and retention. Thus, it is imperative that the dairy firms in Kiambu understand and meet the needs of their customers to foster sustainable growth and development through customer retention.

4.6.1.4 Financial Perspective on Firm's Performance

The study's objective was to determine whether there was a relationship between the financial perspective and firm performance of the Dairy firms. The results are as shown in Table 4.17.

Table 4.17:*Correlation between Financial Perspective and Firm's Performance*

		Financial Perspective	Firm's Perspective
Financial Perspective	Pearson Correlation	1	.767**
	Sig. (1-tailed)		.000
	N	75	75
Firm's Perspective	Pearson Correlation	.767**	1
	Sig. (1-tailed)	.000	
	N	75	75

Source: Research Data (2024)) **. Correlation is significant at the 0.01 level (1-tailed).

Table 4.13 reveals a highly significant positive correlation between Financial Perspective and Firm's Perspective based on research data in Table 4.13. The Pearson correlation coefficients for Financial Perspective and Firm's Perspective are both substantial at .767 ($p < .01$), indicating a strong positive linear relationship. This signifies that there is a robust association between financial metrics and the overall perspective of the dairy firms under investigation. The statistical significance at the 0.01 level emphasizes the reliability of this correlation. The findings suggest that firms focusing on financial indicators are likely to have a positive overall perspective. This information is valuable for strategic decision-makers, highlighting the strategic importance of maintaining financial health and aligning financial objectives with the broader perspective of the organization. The

correlation results provide meaningful insights for firms aiming to optimize their overall perspective by strategically managing their financial performance.

A strong and positive correlation between financial perspective and performance was established ($r=.767$). The implication of the findings was that by engaging in strategies of cost minimization, fostering a high return on investment, and improving revenue growth contributed to the performance of the dairy firms. For instance, to generate more income, many dairy firms have established new markets and diversified their products. Additionally, by embracing technology, many dairy companies were able to improve quality, reduce wastage of resources, and improve communication with their customers. These findings corroborate those of previous studies (Gupta, 2020; Su et al., 2020) that indicated how strategies such as improving asset management, focus on high margin products, avoiding unnecessary borrowing, fostering stock performance, and implementing cost-reduction strategies helped to improve general performance of firms. Furthermore, studies showed that before investment, firms need to carry out feasibility tests to determine the viability of such investments (Khan et al., 2020). Therefore, dairy firms in Kiambu can improve their financial performance through better debt management, reduction in costs of operation, and seeking strategies that increase revenue.

4.6.2 Correlation Summary

Table 4.18

Correlation Summary

	Financial Perspective	Firm's Perspective
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Financial Perspective	Pearson Correlation	1	
	Sig. (1-tailed)		
	N	75	
Firm's Perspective	Pearson Correlation	.767**	1
	Sig. (1-tailed)	.000	
	N	75	75
Customer Perspective	Pearson Correlation	1	
	Sig. (1-tailed)		
	N	75	
Firm's Perspective	Pearson Correlation	.617**	1
	Sig. (1-tailed)	.000	
	N	75	75
Internal Business processes	Pearson Correlation	1	
	Sig. (1-tailed)		
	N	75	
FIRM's performance	Pearson Correlation	.530**	1
	Sig. (1-tailed)	.000	
	N	75	75
Pearson Correlation		1	
Sig. (1-tailed)			
N		75	
Pearson Correlation		.850**	1
Sig. (1-tailed)		.000	
N		75	75

Source: Research Data (2024)) **. Correlation is significant at the 0.01 level (1-tailed).

Based on the Pearson correlation results presented, all selected Balanced Scorecard (BSC) perspectives—financial, customer, and internal business processes—show a statistically significant and positive correlation with firm performance. The financial perspective exhibits the strongest relationship with performance ($r = .767$, $p < .001$), indicating that improvements in financial metrics are strongly associated with better firm outcomes. The customer perspective also demonstrates a significant positive correlation ($r = .617$, $p < .001$), suggesting that customer satisfaction and retention contribute meaningfully to firm performance. Additionally, internal business processes show a moderate yet significant

correlation with performance ($r = .530$, $p < .001$). Overall, these results support the view that the selected BSC dimensions are important predictors of firm performance in dairy enterprises within Kiambu County.

4.6.3 Regression Analysis

The researchers employed a multivariate regression analysis to ascertain BSCP and Dairy Firms' performance. The results are shown in Table 4.18.

Table 4.19:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.866 ^a	.750	.736	.628

a. Predictors: (Constant), Financial, Internal business, Customer, Innovation

Source: Research Data, (2024)

The findings from Table 4.19 provide valuable insights into the overall explanatory power of the study variables, particularly the balanced scorecard perspective (BSCP) components of innovation and learning, internal business processes, and customer perspective to firms' performance. The square value of R 0.75 indicates that these variables collectively account for 75.0% of the variance observed in the firm's

performance. This implies that a substantial portion of the changes in firms' performance can be attributed to the influence of these balanced scorecard perspectives. The 95% confidence interval further supports the conclusion, emphasizing the reliability of the model's explanatory capability.

The correlation coefficient ($R=0.866$) signifies a strong positive relationship between the researched balanced scorecard perspectives and firms' performance. In practical terms, this suggests that as organizations focus on enhancing innovation, learning, internal processes, and customer perspective, they are likely to experience positive impacts on their overall performance. However, it's essential to acknowledge that approximately 25.0% of the variation in firms' performance is not accounted for by these variables, indicating the presence of other factors or unexplored elements that may influence dairy firms' outcomes.

4.6.4 Analysis of Variance (ANOVA)

The goal of the study was to ascertain the analysis of variance (ANOVA) between the BSCP on dairy firms' performance. The results are displayed in Table 4.19.

Table 4.20:

Analysis of Variance

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	82.923	4	20.731	52.548	.000 ^b
	Residual	27.616	70	.395		

Total	110.539	74
a. Dependent Variable: Firm's Performance		
b. Predictors: (Constant), Financial, Internal Business, Customer, Innovation		
Source: Research Data (2024)		

The analysis of variance (ANOVA) presented in Table 4.20 indicates a significant model fit for predicting Firm's Performance based on the predictors Financial, Internal Business, Customer, and Innovation. The regression model accounts for a substantial proportion of the variance in Firm's Performance, as evidenced by the significant F-statistics of 52.548 ($p < .000$). The predictors collectively contribute to explaining the variability in the dependent variable. The model's effectiveness is further supported by the large sum of squares for regression (82.923) compared to the residual sum of squares (27.616). The predictors—Financial, Internal Business, Customer, and Innovation collectively contribute significantly to the model, emphasizing their importance in explaining variations in Firm's Performance. This ANOVA analysis provides valuable insights for decision-makers, highlighting the overall effectiveness of the regression model in capturing and understanding the factors influencing the Firm's Performance.

4.6.5 Regression Coefficients

The study's goal was to determine how the dependent variable firms' performance, related to the BSCP (innovation and learning, internal business processes, and customer perspective). The results are as follows.

4.6.5.1 Regression Coefficients of Innovation and Learning

The regression coefficients of innovation and learning reveal a statistically significant and positive relationship with the firm's performance, emphasizing the impact of addressing and minimizing innovation and learning on enhancing the firm's performance.

Table 4.21

Regression Coefficient of Innovation and Learning

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.680	.225		3.027	.003
1 Innovation & Learning	.763	.055	.853	13.934	.000

Source: Research Data (2024)

From Table 4.20's data was used to produce the regression equation that follows:

$$Y = 0.68 + 0.763X_1$$

The regression analysis presented in Table 4.21 reveals a statistically significant model for predicting Firm's Performance (Y) based on the predictor variable Innovation & Learning (X1). The regression equation, $Y = 0.68 + 0.763X_1$, signifies that the constant term is 0.68, and for every one-unit increase in the predictor variable Innovation & Learning, the Firm's Performance is expected to increase by 0.763 units. The unstandardized coefficient (B) for Innovation & Learning is 0.763, with a standard error of 0.055 and a beta coefficient of 0.853, indicating a strong positive relationship between

Innovation & Learning and Firm's Performance. The t-statistic of 13.934 is highly significant ($p < .000$), reinforcing the reliability of this relationship. The constant term's significant t-statistic of 3.027 ($p = .003$) suggests that even when Innovation & Learning is zero, there is a significant baseline Firm's Performance. This regression equation provides a useful tool for predicting and understanding the impact of Innovation & Learning on Firm's Performance, offering valuable insights for decision-makers in optimizing organizational strategies.

4.6.5.2 Regression Coefficients of Internal Business Process

The regression coefficients of the internal business process reveal a statistically significant and positive relationship with the firm's performance, emphasizing the impact of addressing and minimizing the internal business process on enhancing the firm's performance.

Table 4.21

Regression Coefficient of Internal Business Process

Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	.946	.517		1.829

Internal Business Process	.659	.123	.530	5.343
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Source: Research Data (2024)

From Table 4.21's data was used to produce the regression equation that follows:

$$Y = 0.946 + 0.659X_2$$

The regression analysis presented in Table 4.21 indicates a statistically significant model for predicting Firm's Performance (Y) based on the predictor variable Internal Business Process (X₂). The regression equation, $Y = 0.946 + 0.659X_2$, signifies that the constant term is 0.946, and for every one-unit increase in the predictor variable Internal Business Process, the Firm's Performance is expected to increase by 0.659 units. The unstandardized coefficient (B) for Internal Business Process is 0.659, with a standard error of 0.123 and a beta coefficient of 0.530, suggesting a moderately positive relationship between Internal Business Process and Firm's Performance. The t-statistic of 5.343 is highly significant ($p < .000$), reinforcing the reliability of this relationship. Although the constant term's t-statistic of 1.829 is not statistically significant ($p = .071$), the overall regression equation provides a valuable tool for predicting and understanding the impact of Internal Business Process on Firm's Performance, offering insights for decision-makers in optimizing organizational strategies.

4.6.5.3 Regression Coefficients of Customer Perspective

The regression of customer perspective reveal a statistically significant and positive relationship with the firm's performance, emphasizing the impact of addressing and minimizing customer perspective on enhancing the firm's performance.

Table 4.22

Regression Coefficient of Customer Perspective

Model	Unstandardized Coefficients		Standardized Coefficients	t
	B	Std. Error	Beta	
(Constant)	.991	.410		2.416
1				
Customer Perspective	.683	.102	.617	6.697

Source: Research Data (2024)

From Table 4.22's data was used to produce the regression equation that follows:

$$Y = 0.991 + 0.683X_3$$

The regression analysis presented in Table 4.22 indicates a statistically significant model for predicting Firm's Performance (Y) based on the predictor variable Customer Perspective (X_3). The regression equation, $Y = 0.991 + 0.683X_3$, reveals that the constant term is 0.991, and for every one-unit increase in the predictor variable Customer

Perspective, the Firm's Performance is expected to increase by 0.683 units. The unstandardized coefficient (B) for Customer Perspective is 0.683, with a standard error of 0.102 and a beta coefficient of 0.617, indicating a strong positive relationship between Customer Perspective and Firm's Performance. The t-statistics of 6.697 is highly significant ($p < .000$), reinforcing the reliability of this relationship. The constant term's t-statistic of 2.416 is also statistically significant ($p = .018$), suggesting that even when Customer Perspective is zero, there is a significant baseline for Firm's Performance. This regression equation provides a valuable tool for predicting and understanding the impact of Customer Perspective on Firm's Performance, offering insights for decision-makers in optimizing organizational strategies, particularly in enhancing customer-centric approaches.

4.6.5.4 Regression Coefficients of Financial Perspective

The regression coefficients of financial perspective reveal a statistically significant and positive relationship with the firm's performance, emphasizing the impact of addressing and minimizing financial perspective on enhancing the firm's performance.

Table 4.23

Regression Coefficient of Financial Perspective

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		

	(Constant)	.268	.342		.786	.435
1	Financial Perspective	.831	.081	.767	10.225	.000

Source: Research Data (2024)

From Table 4.23's data was used to produce the regression equation that follows:

$$Y = 0.268 + 0.831X_4$$

The regression analysis presented in Table 4.23 indicates a statistically significant model for predicting Firm's Performance (Y) based on the predictor variable Financial Perspective (X₄). The regression equation, $Y = 0.268 + 0.831X_4$, reveals that the constant term is 0.268, and for every one-unit increase in the predictor variable Financial Perspective, the Firm's Performance is expected to increase by 0.831 units. The unstandardized coefficient (B) for Financial Perspective is 0.831, with a standard error of 0.081 and a beta coefficient of 0.767, indicating a strong positive relationship between Financial Perspective and Firm's Performance. The t-statistics of 10.225 is highly significant ($p < .000$), reinforcing the reliability of this relationship. The constant term's t-statistic of 0.786 is not statistically significant ($p = .435$). This regression equation provides a valuable tool for predicting and understanding the impact of Financial Perspective on Firm's Performance, offering insights for decision-makers in optimizing organizational strategies, particularly in managing financial health and aligning financial objectives with overall performance goals.

4.6.5.5 Multivariate Regression

Table 4.24*Multivariate Regression*

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	.268	.342		.786	.435
Financial Perspective	.831	.081	.767	10.225	.000
(Constant)	.991	.410		2.416	.018
Customer Perspective	.683	.102	.617	6.697	.000
(Constant)	.680	.225		3.027	.003
Innovation & Learning	.763	.055	.853	13.934	.000
(Constant)	.946	.517		1.829	.071
Internal Business Process	.659	.123	.530	5.343	.000

The results of the multivariate regression analysis reveal that all four independent variables—financial perspective, customer perspective, innovation & growth, and internal business process—have a statistically significant influence on the performance of dairy firms. These variables, derived from the Balanced Scorecard framework, collectively contribute to explaining organizational performance, with innovation & growth emerging

as the most influential predictor ($\beta = .853, p < .001$), followed by the financial perspective ($\beta = .767, p < .001$), Customer Perspective ($\beta = .617, p < .001$), and internal business process ($\beta = .530, p < .001$). These findings are consistent with prior studies. For instance, Hameed et al. (2023) emphasized the pivotal role of innovation in driving firm competitiveness and adaptability in dynamic markets. Similarly, Su et al. (2020) highlighted the importance of financial strategies in enhancing profitability and sustainability. In line with this, Zakari and Ibrahim (2021) demonstrated how customer-centric approaches, such as improved customer service delivery, positively affect organizational outcomes. Collectively, these findings support the assertion that implementing a balanced set of strategic measures significantly enhances the performance of dairy firms.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.0 Introduction

The chapter provides the summary of the entire project and the conclusion of the research findings. Furthermore, recommendations aimed at improving Kiambu dairy firms' performance were provided. Finally, recommendations for further research were also highlighted based on the limitations of this study.

5.1 Summary of Findings

The study aimed at establishing a relationship between balanced scorecard perspectives (Customer, innovation and learning, and financial perspectives) and Kiambu dairy firms' performance. The objectives focused on how each of the independent variables (customer, innovation and learning, and financial perspectives) influence firms' performance. This study was informed by research study gaps that included the lack of sufficient information on application of balanced scorecard in the dairy sector in Kenya to determine performance. A quantitative research method and a correlational research design method were applied. A sample of 84 respondents was obtained using random sampling design from various dairy firms in Kiambu. From the findings, it was apparent that a positive and strong relationship between balanced scorecard perspectives and firm performance existed. A correlation between internal business processes and performance was established. The study established a strong relationship between customer perspective and organizational performance. Furthermore, a strong and positive correlation between financial perspective and organizational performance was established. The managerial

implication was that Kiambu dairy firms should embrace innovation, employ strategies aimed at fostering customer satisfaction, and pursue profitable investments.

5.2 Conclusion

5.2.1 Influence of Customer Perspective on Performance

The research established a strong and positive relationship between customer perspective and performance. Customer perspective objective strategies employed included a focus on high standards of hygiene, quality, and timely delivery of services. By adhering to these strategic objectives, the dairy firms achieved great performance, especially in terms of customer satisfaction, loyalty, and retention, which were necessary for financial performance and competitive edge. Thus, investing in the implementation of customer perspective strategies was fundamental in fostering the performance of the dairy firms.

5.2.2 Influence of Learning and Innovation Perspective on Performance

The study established a strong relationship between learning and innovation perspectives and performance. Specifically, the integration of new technologies, promotion of innovative cultures, and the focus on continuous improvement helped the dairy firms overcome efficiency challenges. As a result, the dairy firms managed to lower the cost of production, culminating in increased revenue and profitability. Thus, the innovative perspective strategies were vital for the dairy firms as they contributed significantly not just to competitive edge but also to the excellent general performance of the company.

5.2.3 Influence of Internal Business Process on Performance

The study established a significant relationship between internal business processes and the performance of the dairy firms. From the findings, by improving Internal business process, focusing on improving quality, enhancing efficiency through technology, and fostering supply chain optimization improved the performance of the dairy firms. For instance, by fostering efficiency, firms managed to cut down the cost of operation and minimize wastage leading to higher profit margins. Also, by focusing on improving hygiene and quality, the firms managed to attract and retain customers. These developments were necessary in enhancing the performance of the dairy firms and their competitive edge.

5.2.4 Influence of Financial Perspectives on Performance

A strong relationship between financial perspectives and dairy firms' performance was established. The findings showed that by venturing profitable business portfolios, reducing the cost of operation, and fostering debt management helped to improve the performance of the dairy firms. For instance, through diversification and venturing into new markets, the firms generated more revenue. Furthermore, by reducing the cost of production, firms increased profitability and a strong financial outlook. Thus, implementation of financial strategies was vital for the firm's general performance.

5.3 Recommendations

5.3.1 Recommendations on Research Findings

Learning and Innovation Perspective

The managers of the dairy firms in Kiambu need to continue investing more on emerging and relevant technologies, especially with a view to understanding customer behavior, improving communication, and enhancing business efficiency. As a result, customer satisfaction can be improved leading to customer retention and organizational performance. There is a need to encourage a culture of innovation within the organization to meet evolving customer needs and stay ahead of competitors. This can involve investing in research and development, encouraging employee creativity, and actively seeking customer feedback for product or service improvements.

Internal Business Perspective

There is a need to foster continuous improvement and competitive edge through product diversification and market expansion. Apart from selling fresh milk, the dairy firms need to also increase the production of other milk products to generate more revenue. By maintaining high quality standards, hygiene, and efficiency, the dairy firms can generate more revenue and profits.

Financial Perspective

Dairy firms need to manage their debt levels and should only take loans to pursue profitable businesses. Bad debts can ruin the reputation of the firms and scare potential investors. With better debt management strategies, profitability is enhanced.

Customer Perspective

Dairy firms in Kiambu need to enhance customer satisfaction by understanding their needs and expectations. This may involve conducting regular customer surveys, implementing

feedback mechanisms, and promptly addressing customer concerns or complaints. Customer objectives should be aligned with the overall organizational strategy. This involves integrating customer-focused goals and initiatives into the strategic planning process and regularly reviewing progress towards achieving these objectives.

5.3.2 Recommendations for Further Research

Future researchers need to focus on other industries and use a representative sample to increase the generalization of the findings. The current study only focused on the dairy firm but there is the need to also understand the phenomenon from other industries. Future researchers need to focus on establishing whether there exist confounding variables that affect the relationship between balanced scorecard perspectives and firm's performance. The main limitation of the current study was that it focused on the dependent and independent variables but there could be a possibility of confounding variables influencing the relationship.

REFERENCES

- Al-Dweikat & Nour, I. (2020). Balanced scorecard critical success factors of Jordanian commercial banks and its effect on financial performance. *Accounting and Finance Research*, 7(3), 146-153.
<https://doi.org/10.5430/afr.v7n3p146>
- Abuelhassan, E. & AlGassim, A. (2022). How organizational justice in the hospitality industry influences proactive customer service performance through general self-efficacy. *International Journal of Contemporary Hospitality Management*, 34 (7), 2579–2596.
<https://doi.org/10.1108/IJCHM-10-2021-1238>
- Agag, G., Durrani, B., Shehawy, Y., & Alharthi, M. (2023). Understanding the link between customer feedback metrics and firm performance. *Journal of Retailing and Consumer Services*, 73(3), 234-238.
<https://doi.org/10.1016/j.jretconser.2023.103301>
- Aydiner, A., Tatoglu, E., Bayraktar, E., Zaim, S., & Delen, D. (2020). Business analytics and firm performance: The mediating role of business process performance. *Journal of Business Research*, 96(8), 228-234.
<https://doi.org/10.1016/j.jbusres.2018.11.028>
- Alshehhi, A., Nobanee, H., & Khare, N. (2020). The impact of sustainability practices on corporate financial performance: literature trends and future research potential. *Sustainability*, 10(2), 494.
<https://doi.org/10.3390/su10020494>
- Aninful, G., Boakye, D., Bempah, N. (2021). Determinants of smes' financial performance: Evidence from an emerging economy. *Journal of Small Business & Entrepreneurship Forthcoming*, 3(4), 23-29
<http://doi:10.1080/08276331.2021.1885247>

- Blair, G., Coppock, A., & Humphreys, M. (2023). *Research design in the social sciences: declaration, diagnosis, and redesign*. Princeton University Press. [doi:10.1515/9780691199580](https://doi.org/10.1515/9780691199580)
- Başkarada, S. & Koronios, A. (2020). A philosophical discussion of qualitative, quantitative, and mixed methods research in social science. *Qualitative Research Journal*, 2(4), 1-6. <http://www.emeraldinsight.com/1443-9883.htm>
- Burkholder, G. J., Cox, K. A., Crawford, L. M., & Hitchcock, J. H. (2019). *Research design and methods*. Sage.
- Chidozie, E. & Anayochukwu, A. (2020). Customer satisfaction and organizational performance of the Nigerian banking sub-sector. *International Journal of Business and Management Invention (IJBMI)*, 8(3), 79-85. <https://www.internationaljournalcorner.com/index.php/theijhss/article/view/141093>
- Corina, G., Liviu, I., Stegorean, R. (2020). Determinants of organizational performance: The case of Romania. *Management & Marketing Challenges for the Knowledge Society* (2), 285-300. https://www.researchgate.net/publication/227430479_Determinants_of_organizational_performance_The_case_of_Romania
- Creswell. J.W. & Creswell, J. D. (2020) *Research design: qualitative, quantitative, and mixed methods approaches*. (4th ed) Sage.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 318–339. https://www.researchgate.net/publication/200085965_Perceived_Usefulness_Perceived_Ease_of_Use_and_User_Acceptance_of_Information_Technology

- Fatihudin, D. (2020). How to measure financial performance. *International Journal of Civil Engineering and Technology (IJCIET)*, 9(6), 553-557.
<http://iaeme.com/Home/issue/IJCIET?Volume=9&Issue=6>
- Ganesh, R., Haslinda, A., & Raghavan, S. (2021). Customer satisfaction: an interpretation of theories with disconfirmation paradigm. *The International Journal of Business & Management*, 4(12), 269-276.
<https://www.internationaljournalcorner.com/index.php/theijbm/article/view/127340>
- Greenwood, M., & Mir, R. (2020). Critical management studies and stakeholder theory. In J. S. Harrison, J. B. Barney, R. E. Freeman, & R. A. Phillips (Eds.), *The Cambridge Handbook of Stakeholder Theory*, (PP. 35-52). Cambridge University Press. <https://doi.org/10.1017/9781108123495.003>
- Gupta, V. & Chopra, M. (2020). Conceptualization of the balanced scorecard for organizational performance measurement. *The impact of KM practices on Organizational performance*, 2(3), 1-5.
<http://dx.doi.org/10.1108/VJIKMS-07-2016-0038>
- Hariandja, S. & Vincent, F. (2022). Linking customer experience, satisfaction, and loyalty to brand power and performance in international hotels. *Innovative Marketing*, 18(3), 59-71. [doi:10.21511/im.18\(3\).2022.06](https://doi.org/10.21511/im.18(3).2022.06)
- Hameed, W., Nisar, Q., & Wu, H. (2021). Relationships between external knowledge, internal innovation, firms' open innovation performance, service innovation and business performance in the Pakistani hotel industry. *International Journal of Hospitality Management*, 92(3), 23-45.
[doi:10.1016/j.ijhm.2020.102745](https://doi.org/10.1016/j.ijhm.2020.102745)
- Jiménez-Jiménez, D. & Sanz-Valle, R. (2020). Innovation, organizational learning, and performance. *Journal of Business Research*, 64(4), 408-417.
<https://psycnet.apa.org/doi/10.1016/j.jbusres.2010.09.010>

- Karisa, J., & Wainaina, L. (2020). Balanced scorecard perspectives and organizational performance: Case of Kenyatta National Hospital, Kenya. *International Journal of Business Management, Entrepreneurship and Innovation*, 2(3), 102-113. <https://doi.org/10.35942/jbmed.v2i3.140>
- Khan, S., Hussain, S., & Yaqoob, F. (2020). Determinants of customer satisfaction in fast food industry a study of fast-food restaurants Peshawar Pakistan. *Studia Commercialia Bratislavensia*, 6 (21), 56-60. <http://dx.doi.org/10.2478/stcb-2013-0002>
- Kaplan, R. & Norton, D. (2014). *The balanced scorecard*. Business news Publishing.
- Kourtzidis, S. & Tzeremes, G. (2020). Investigating the determinants of firm performance: A qualitative comparative analysis of insurance companies. *European Journal of Management and Business Economics*, 29 (1), 3–22. <https://doi.org/10.1108/EJMBE-09-2018-0094>
- Mądra-Sawicka, M., & Paliszkiewicz, J. (2020). Information sharing strategies in the social media era: The perspective of financial performance and CSR in the food industry. *Information*, 11(10), 463. <https://doi.org/10.3390/info11100463>
- Maheshwari, M., Gupta, K., & Sharma, A. (2020). Internal business process perspective of balanced scorecard: driver to outshine in front of customers and shareholders: an empirical study on inter-bank and inter-sector comparison of public and private sector banks in India. *Journal of Critical Review*, 7(13), 255-262. <http://dx.doi.org/10.31838/jcr.07.13.43>
- Mugenda, O.M. & Mugenda, A.G. (2003) *Research methods, quantitative and qualitative approaches*. ACT.
- Namin, S. & Ebrahimpour, H. (2020). The impact of internal processes of strategy implementation on noncommercial performance of employees at imam

Khomeini relief committee. *Arabian Journal of Business and Management Review*, 3(1), 143-147.

https://www.arabianjbmr.com/pdfs/NG_VOL_3_1/12.pdf

Okorie, G. (2021). Usefulness of internal business process perspective in performance appraisal using balanced scorecard of objective as an alternative to staff performance appraisal and development (SPADEV) Reporting System in the Civil Service of Lagos State, Nigeria. *Journal of Media & Management*, 3(4), 1-8.
[https://doi.org/10.47363/JMM/2021\(3\)133](https://doi.org/10.47363/JMM/2021(3)133)

Ombuna, D., Omido, K., Garashi, H., Odera, O., & Okaka, O. (2020). Impact of balanced scorecard usage on the performance of commercial banks. *International Journal of Information Technology and Business Management*, 10(1), 40-48. <http://www.jitbm.com/>

Otioma, C. (2022). IT capability, organizational learning and innovation performance of firms in Kenya. *Journal of the Knowledge Economy*, 1(7), 1-10 <https://doi.org/10.1007/s13132-021-00886-8>

Rapitasari, D., Kharismawati, I., & Razak, A. (2021). Application of the balance scorecard as a performance measurement instrument. *Growth*, 5(1), 13-16. <https://ideas.repec.org/a/aoj/growth/v5y2018i1p13-16id780.html>

Santos, B. & Brito, L. (2020). Toward a subjective measurement model for firm performance. *BAR - Brazilian Administration Review*, 9(4), 95-117
<https://doi.org/10.1590/S1807-76922012000500007>

Serhan, M. & Serhan, C. (2021). The impact of food service attributes to customer satisfaction in a rural university campus environment. *International Journal of Food Science*, 1(10), 1-12.
<https://doi.org/10.1155/2019/2154548>

- Shah, S., Shahid, J. & Qadar, B. (2020). Role of service quality and customer satisfaction in firm's performance: Evidence from Pakistan hotel industry. *Pakistan Journal of Commerce and Social Sciences*, 12(1), 167-182. <https://hdl.handle.net/10419/188340>
- Singh, K., & Misra, M. (2021). Linking corporate social responsibility (csr) and organizational performance: the moderating effect of corporate reputation. *European Research on Management and Business Economics*, 27 (2), 20-26. <https://doi.org/10.1016/j.iedeen.2020.100139>
- Su, F., Cheng, C., Chung, H. & Chen, F. (2020). Innovation capability configuration and its influence on the relationship between perceived innovation requirement and organizational performance: Evidence from IT manufacturing companies. *Journal of Manufacturing Technology Management*, 29 (8), 1316-1331. <https://doi.org/10.1108/JMTM-03-2018-0097>
- Singh, K., & Misra, M. (2021). Linking corporate social responsibility (csr) and organizational performance: the moderating effect of corporate reputation. *European Research on Management and Business Economics*, 27(4),45-56. <https://doi.org/10.1016/j.iedeen.2020.100139>
- Turner, P. (2020). Critical values for the Durbin-Watson test in large samples. *Applied Economics Letters*, 27(18), 1-5. <https://doi:10.1080/13504851.2019.1691711>
- Tobi, H. & Kampen, K. (2020). Research design: the methodology for interdisciplinary research framework. *Quality & Quantity*, 52 (3), 1209–1225. [doi:10.1007/s11135-017-0513-8](https://doi.org/10.1007/s11135-017-0513-8)
- Tibbs, Y. & Langat, K. (2021). Internal process, learning perspective of balance scorecard and organizational performance a case of Tata Chemicals Magadi Limited, Kenya. *International Journal of Economics, Commerce*

and Management, 4(11), 458-465. <https://ijecm.co.uk/wp-content/uploads/2016/11/41130.pdf>

Werlang, N. & Rossetto, R. (2020). The effects of organizational learning and innovation on organizational performance in the service provision sector. *Gestão & Produção*, 26(3), e3641. <https://doi.org/10.1590/0104-530X3641-19>

Zakari, A. & Ibrahim, A. (2021). Impact of customer satisfaction on business performance of SMEs in Nigeria. *International Journal of Research in Business and Social Science*, 10(5), 46–51. <https://doi.org/10.20525/ijrbs.v10i5.1291>

APPENDICES

APPENDIX I: DATA COLLECTION TOOL (QUESTIONNAIRE)

Thank you for your acceptance to participate in my studies. The questionnaire is brief and will take a maximum of 10 minutes. The information you provide will be solely used for academic purposes and treated with utmost confidentiality. This questionnaire has two (2) sections: demographic data and objective questions. You are NOT required to write your name on this questionnaire. Please indicate your level of agreement with the following statements by selecting the most appropriate response using X mark

SECTION 1: Demographic Data

1. What is your gender?

- ☐ Male
- ☐ Female

2. How old are you?

- ☐ 25-35 years
- ☐ 35-45 years
- ☐ 45-55 years
- ☐ 55-65 years

- Above 65 _____

3. What is your Education Level?

- High School
- College
- Diploma
- Undergraduate
- Masters/Doctorate

4. The period you have served in the organization.

- 5 years and below
- 6- 10 years
- 11- 15 years
- 16 years and above

5. Kindly state the department you work in

- Finance & Accounting
- HR & Adm.
- Sales & Marketing
- Customer Service

SECTION 2. INNOVATION AND LEARNING

Please indicate your level of agreement with the following statements by selecting the most appropriate response using X mark

	Likert Scale	Strongly disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
Using the Likert Scale, State the extent to which you agree with each of the following. Please circle your answer						
	Statements	1	2	3	4	5
1	The company consistently embraces and integrates new technologies to enhance its products.					
2	The commitment to technological innovation has positively impacted the company's overall performance and market position					
3	The company actively supports initiatives that promote a culture of continuous innovation among its workforces.					

4	There is a receptiveness to exploring and implementing novel approaches to meet evolving customer needs.					
5	Employees feel encouraged to share unconventional ideas, and the company is responsive to such contributions.					
6	The company encourages calculated risk-taking in the pursuit of innovation and growth.					

SECTION 3: INTERNAL BUSINESS PROCESSES

Please indicate your level of agreement with the following statements by selecting the most appropriate response using X mark

	Likert Scale	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
Using the Likert Scale, State the extent to which you agree with each of the following. Please circle your answer						
	Statements	1	2	3	4	5

1	The company provides effective training programs that contribute to the professional development of employees					
2	Employees have access to ongoing training opportunities to enhance their skills and knowledge.					
3	Employees feel that their contributions are accurately assessed during the appraisal process.					
4	The company prioritizes efficiency in its day-to-day operations, resulting in streamlined workflows.					
5	Employees have access to the necessary tools and resources to perform their duties efficiently.					
6	The company effectively communicates changes in policies, procedures, or organizational structure to employees.					

SECTION: 4 CUSTOMER PERSPECTIVE

Please indicate your level of agreement with the following statements by selecting the most appropriate response using X mark

	Likert Scale	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
Using the Likert Scale, State the extent to which you agree with each of the following. Please circle your answer						
	Statements	1	2	3	4	5
1	The quality of products provided by their company has noticeably improved over time.					
2	The consistency in quality has increased, leading to a more satisfying experience for customers					

3	The company has demonstrated a commitment to meeting delivery deadlines consistently.					
4	They have experienced a noticeable improvement in the punctuality of their product/service deliveries.					
5	They have noticed and appreciate the high standards of hygiene maintained in the delivery of products					
6	The company's commitment to hygiene and cleanliness is evident in all interactions and transactions.					

SECTION 5: FINANCIAL PERSPECTIVE

Likert Scale	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5

Using the Likert Scale, State the extent to which you agree with each of the following. Please circle your answer						
	Statements	1	2	3	4	5
1	The organization has met/exceeded its profit targets.					
2	The organization effectively controls and manages operating costs to support financial objectives.					
3	The organization maintains a strong financial position					
4	The organization effectively communicates its financial performance to shareholders					
5	The organization effectively manages its debt levels to ensure long-term sustainability.					
6	I am satisfied with the organization's dividend payouts and the creation of shareholder value.					

SECTION 6: FIRM's PERFORMANCE

Please indicate your level of agreement with the following statements by selecting the most appropriate response using X mark

	Likert Scale	Strongly disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
Using the Likert Scale, State the extent to which you agree with each of the following. Please circle your answer						
	Statements	1	2	3	4	5
1	They maintain a commitment to timely order processing and delivery to meet customer expectations					
2	Their company consistently delivers high-quality products/services to meet customer expectations.					

3	Customer feedback is actively sought and utilized to enhance their products/services.					
4	Profitability is a key consideration in decision-making processes and strategic planning.					
5	Continuous improvement initiatives are in place to address any identified delays or inefficiencies.					
6	The company actively explores opportunities for business expansion and diversification.					

APPENDIX II: CONSENT FORM

Consent Form for Research Participation

Title of Study: **Determinants of the Balance Score Card on Performance of Dairy Firms in Kenya: A Case of Kiambu County**

Principal Investigator: [Your Name]

Institution: [Your Institution]

Contact Information: [Your Contact Information]

Date: 4/82024

Introduction:

You are invited to participate in a research study conducted by [Your Name] from [Your Institution]. The purpose of this study is to explore exploring the relationship between selected balanced scorecard variables and performance of dairy firms in Kiambu county.

Purpose of the Study:

The study aims to understand how the Selected Balance Score Card variables affect the performance of dairy firms in Kiambu County. The findings will contribute to the development of strategies for improving the performance and competitiveness of dairy firms in the region.

Procedures:

If you agree to participate in this study, you will be asked to complete a questionnaire that will take approximately 10 minutes of your time. The questionnaire will include questions about your dairy firm, the use of the Balance Score Card, and your perception of its impact on performance.

Voluntary Participation:

Your participation in this study is entirely voluntary. You have the right to refuse to participate or to withdraw from study at any time without penalty. Your decision to participate or not will not affect your relationship with [Your Institution] or any other entity.

Confidentiality:

All information collected in this study will be kept confidential. Your responses will be anonymized and will not be linked to your identity. The data will be used solely for research purposes and will be stored securely. Only the research team will have access to the data.

Risks and Benefits:

There are no foreseeable risks associated with participating in this study. While you may not benefit directly from participating, your responses will contribute to a better understanding of the factors influencing the performance of dairy firms in Kiambu County, which could benefit the industry.

Compensation:

There is no compensation for participating in this study.

Contact Information:

If you have any questions or concerns about this study, please feel free to contact [Your Name] at [Your Contact Information]. If you have any questions about your rights as a research participant, you may contact [Your Institution's Ethics Committee] at [Ethics Committee Contact Information].

Consent:

By signing below, you indicate that you have read and understood the information provided above, and that you voluntarily agree to participate in this study.

Participant's Name: _____

Participant's Signature: _____

Date: _____

Researcher's Name: _____

Researcher's Signature: _____

Date: _____

Thank you for your participation.

APPENDIX III: LIST OF DAIRY FIRMS IN KIAMBU COUNTY

1. Gathiga Dairy Firm
2. Tilila Dairy
3. Ndumberi Dairies
4. New Mwalimu Dairy
5. Delight Dairy Farm
6. Guango Dairy Ltd
7. Brookside Dairy Ltd
8. Yummy Dairy Products
9. Ndumberi Dairy Farmers
10. Green Acre Dairy
11. Milk & Fruit Centre

Source: Kenya Dairy Board

APPENDIX IV: OPERATIONAL DEFINITION OF VARIABLES

Variables	Measures	Scale	Theory	Authors
Customer perspectives	• Improved quality • Timely delivery • Improved communication • High standards of hygiene	5-Point Likert Scale	Value-Percept Disparity Theory	Serha & Serha (2021) Khan et al. (2020), Chidozie & Anayochukwu (2020), Zakari & Ibrahim, (2021), Tibbs & Langat (2021)
Internal Business Processes	• Employee training • Employee appraisal • Efficiency • Change management	5-Point Likert Scale	Resource-Based Theory	Karisa and Wainaina (2020), Maheshwari et al. (2020). Namin & Ebrahimpour (2021), Okorie (2021)
Innovation and Learning	• Adoption of technology • Innovative culture • Open to new ideas and services • Risk-taking	5-Point Likert Scale	Technology Adoption Theory	Al-Dweikat, et al. (2021), Gupta & Chopra (2021), Gupta et al. (2021), Pufal & Zawislak (2022)

Variables	Measures	Scale	Theory	Authors
Financial Perspectives	• Creation of shareholder value • Debt reduction • Strong financial position • High return on investment	5-Point Likert Scale	Resource-Based Theory	Mądra-Sawicka & Paliszkiewicz (2020), Fatihudin (2021)
Firm's Performance	• Customer satisfaction • Cost reduction • Efficient use of resources • Increased sales and profits • Customer retention • Business expansion	5-Point Likert Scale	Resource-Based Theory	Tibbs & Langat (2021), Kourtzidis & Tzeremes (2020), Fareso (2023)

Source: Author, 2024

APPENDIX V: NACOSTI RESEARCH PERMIT

 REPUBLIC OF KENYA NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION Ref No: 676341	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION Date of Issue: 09/August/2024
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This is to Certify that Ms., Susan Atieno Orlando of Kenya Methodist University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kiambu on the topic: DETERMINANTS OF THE BALANCE SCORE CARD ON PERFORMANCE OF DAIRY FIRMS IN KENYA: A CASE OF KIAMBU COUNTY for the period ending : 09/August/2025.	
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