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**EFFECTS OF STRATEGIC CAPABILITIES ON SUSTAINABLE PERFORMANCE IN
COMMERCIAL DOMESTIC AIRLINES IN KENYA**

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MCOM 145048

**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE AWARD OF MASTER OF COMMERCE DEGREE OF STRATHMORE**



UNIVERSITY

2024

DECLARATION

Student's Declaration

I declare that this dissertation has not been submitted and approved for the award of any degree by this university or any other university. As far as I am aware, the project contains no materials previously published by a person except references made to the project itself.

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Supervisor's Approval

The dissertation of Francis Ngumbi Mutua was reviewed and approved by the following University Supervisor.

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Date:30th May 2024.....

Institution: **Strathmore University Business School**



ABSTRACT

In an industry characterized by intense competition, volatile market conditions, evolving customer preferences, effective deployment of strategic capabilities has emerged as a critical determinant of a domestic commercial airline's performance. Strategic capabilities encompass having tangible and intangible resources, threshold, and core competencies that enable organizations to align resources with their long-term objectives. Airlines that leverage strategic capabilities bolster their competitive positioning and financial stability. Compared to the rest of the globe, Africa's airline industry performance is below average in market share and profitability. The competitive threats from multinational players globally have made African airlines aware of their precarious situation. That has incentivized the airlines to proactively engage in strategic capabilities to enhance their performance. In Kenya, several challenges face the commercial domestic airlines, including high fuel prices, cost control, fleet replacement, high taxes, and an unconducive business environment. To effectively compete in the global market, competitive strategies have gained traction as a way of enhancing performance, gaining market share, enhancing profitability, and brand loyalty. However, extant literature linking strategic capabilities adopted and influence on social, economic, and environmental performance of domestic commercial airlines is thin. This area has received little attention in academic inquiry. Therefore, the study closed the gap by investigating the effect of strategic capabilities, namely tangible and intangible resources, threshold, and core competencies, on domestic commercial airlines' economic, social and environmental performance in Kenya. This study used a quantitative descriptive research design to estimate the variables. The strategic balancing theory informed the study's review and utilized positivist research philosophy. Purposive sampling was utilized to select 103 respondents. A questionnaire was utilized to collect primary data. Data was analyzed using descriptive and inferential analysis with SPSS. Ordinal regression was employed to determine the magnitude and nature of the relation between the variables. The result of the study demonstrated that tangible resources, threshold, and core competencies had a positive impact on economic performance of the airlines, while intangible resources had an adverse effect. Intangible resources, threshold, and core competencies positively impacted the airlines' social and environmental performance, while tangible resources were found to have an adverse effect. The study recommends that investment deepening by the national government to create a conducive environment and lower the cost of doing business and airlines to enhance the passenger experience and brand loyalty. Airlines are also encouraged to adopt measures to minimize their carbon footprint by investing in alternative fuels, efficient fleets, and green technologies, and support community initiatives to enhance their reputation and drive sustainable business. The main limitation of the study was that it was a cross-sectional study, hence it is difficult to establish trends or variable patterns over time.

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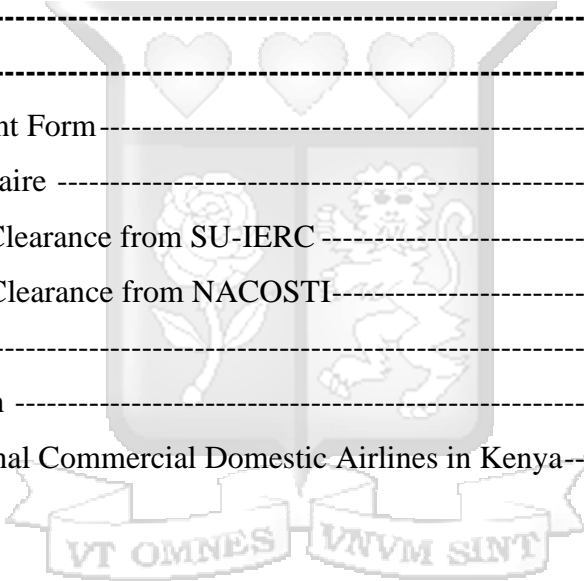
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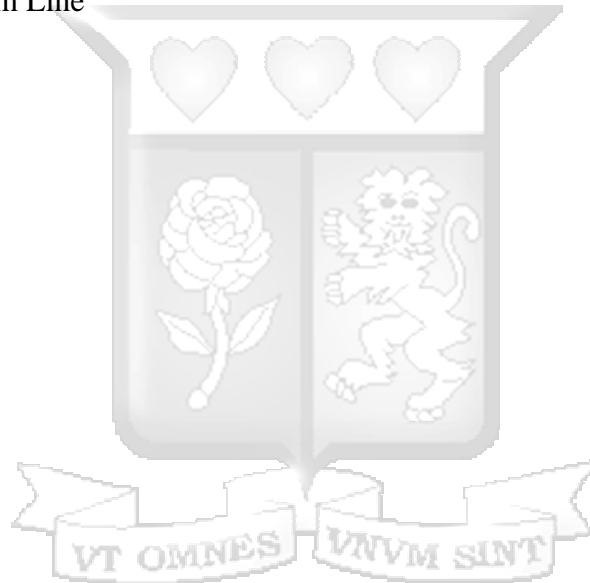
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ABBREVIATIONS AND ACRONYMS

AFDB	African Development Bank
AFRAA	African Airlines Association
IATA	International Air Transports Association
KCAA	Kenya Civil Airline Authority
OECD	Organisation for Economic Cooperation and Development
SAATM	Single African Air Transport Market
TBL	Triple Bottom Line



OPERATIONAL DEFINITION OF KEY TERMS

Available seat miles (ASM): The metric measures an airline's capacity to carry the passengers. This is calculated by multiplying the seats available by the distance flown in kilometers or miles.

CASM-Ex Fuel (CASM-Ex): This is an airline cost metric calculated by dividing the operation expenses by available seat miles (ASM) and subtracting the fuel cost.

Domestic Commercial Airlines: These are airline companies with regularly scheduled flights and routes authorized and approved by authorities to transport passengers, cargo, or mail for remuneration or hire in the domestic market.

Strategic Capabilities: These are tangible and intangible resources in addition to threshold and core competencies that enable an organization to align resources with long-term objectives to attain its goals.

Cost-per-Available-Seat-Mile (CASM): This is an efficiency measure. It is calculated dividing operating expenses by available seat miles.

Load Factor: This is a utilization measure. It is the percentage of the available seating capacity in an airline that has been filled with passengers. A high load factor implies that an airline has sold most of the available seats. It is preferred to a low load factor.

Revenue per Available Seat Mile (RASM): This is an efficiency measure calculated from dividing a total revenue of an airline by available seat miles (ASM).

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DEDICATION

To my lovely family, My wife Petronillah Nyambura, my daughters Cassie Nyawira and Tasha Makena ,my brothers Steve Masua and the late Joseph Muhoro. My parents who gave up everything for my success Mary and Patrick Mutua.



CHAPTER ONE

INTRODUCTION

1.1 Background of Study

The capacity to detect and react to market opportunities, and threats with speed, surprise, and efficiency has become critical for firms to survive in today's unpredictable, uncertain, complicated, and ambiguous business environment (Kamau, 2020). Retrenchment, corporate turnaround, and restructuring are only a few of the options accessible to a firm's management for enhancing the company's capabilities in response to changes in external environment (Astuti, 2016). Historical trends in firm performance dynamics have been shaped by various factors, including socio-economic conditions, political conditions, technological advances, and shifts in societal expectations (O'Reilly, Caldwell, Chatman, and Doerr, 2014). One major trend has been the increasing globalization of business, which has led to increment competition and the need for organizations to adapt to dynamic business conditions. To gain competitive edge over their rivals, firms are becoming more focused on efficiency and cost-cutting measures, as well as seeking out new markets and diversifying their product and service offerings to enhance their strategic capabilities across the globe (Hitt, Ireland, and Hoskisson, 2016).

Companies such as Amazon, Google and Microsoft are continuously emphasizing research and development and developing the skills and capabilities of their workforce and resources to increment their productivity and profit margins (Bin and Shmailan, 2015; Cooper and Folta, 2017). This has accelerated the development of intellectual property rights laws to protect innovations. Tech firms have also adapted to the rapid pace of technological advancement to make strategic investments in digital marketing, e-commerce, and data analytics (McAfee and Brynjolfsson, 2017). Additionally, leading logistical, communication, social media firms and airlines across the globe have also adopted strategic capabilities by clustering in a strategic geographical area to secure a competitive edge over rivals. Firms such as Apple, Meta, Microsoft, Amazon, and Alphabet have clustered in Silicon Valley in the USA, where there is a talented pool, established infrastructure, and vibrant marketplace that provides concise head start when

compared to alternative locations. Also, airlines such as Singapore Airlines, Qatar Airlines, Air New Zealand and Emirates continue to put more emphasis on developing the skills and capabilities of their workforce and resources to increase their productivity and customer loyalty due to superior services they offer (Bereznoy, 2019; IATA, 2024; Teece and Linden, 2017).

In Africa, large companies such as MTN in South Africa and Dangote Cement Plc have adopted strategic capabilities such as intangible resources, threshold, and core competencies to secure a competitive edge over their rivals in a cut throat competitive environment (Abaho et al., 2016; Mutambra, Sigauke and Sibanda, 2019; Oyedokun, 2019). In Kenya, firms such as Kenya Airways have also adopted strategic capabilities by clustering in a strategic geographical area to secure a competitive edge over rivals (Njeri and Susan, 2018; Rugendo, 2022).

In the past, firms did not disclose if they adopted ethical practices to make a profit or gain a competitive edge over rivals. Consumers, investors, and other stakeholders have become more conscious of issues such as diversity, sustainability, and inclusion and have increasingly sought out companies that align with their values. That has led to incrementd scrutiny of companies' practices and performance and pressure on firms to be more transparent and accountable on issues such as labour rights, environmental sustainability, and ethical business practices (Ong and Djajadikerta, 2020). As a result, listed firms on major stock exchanges across the globe have adopted strategic capabilities that align and comply with market consumers' preferences and market regulations to enhance their performance (Zhang et al., 2022).

1.1.1 Strategic Capabilities

Strategic capabilities refer to an organizations' collective resources, skills, and competencies that enable it to achieve its long-term objectives and attain a competitive edge in the marketplace. These capabilities encompass several factors, such as the organization's human capital, technological infrastructure, financial resources, brand reputation, intellectual property, and strategic partnerships (Huikkola, Kohtamäki, and Ylimäki, 2022). Strategic capabilities enable a firm to create value and adopt defensive

and offensive positions in industry to yield high-level returns on investment and enhance market share in the economic, social, and environmental spheres of influence. A robust set of strategic capabilities allows an organization to effectively respond to market dynamics. It also capitalizes on emerging opportunities by navigating challenges in a dynamic business environment such as sustainability in its operations and social obligations in its operating environment. Firms that have appropriate strategic capabilities can easily leverage the available opportunities to outperform their rivals economically, socially and environmentally in an efficient and sustainable way (Atikiya, Mukulu, Kihoro, and Waiganjo, 2015).

Strategic capabilities encompass having tangible and intangible resources in addition to threshold and core competencies that enable an organization to align resources with long-term objectives to realize its goals and objectives. Strategic capabilities also facilitate companies to gain competitive advantage in addition to creating value for their customers. Resources comprise a combination of tangible and intangible resources. Tangible resources are physical assets that can be quantified, seen, and touched, such as machinery, technology, land, cash, stocks, resources, or capital. The intangible resources are the non-physical assets that cannot be seen, quantified, nor touched, such as intellectual property, expertise, origination culture, or brand reputation assets that a business may use to obtain a competitive edge (Hattab, Atti, and Sabeeh, 2023; Huikkola, Kohtamäki and Ylimäki, 2022).

Threshold capabilities refer to the basic requirements a company must possess to operate in a particular market or industry successfully. These capabilities represent minimum standards that a company needs to meet to be considered competitive and avoid being at a disadvantage. Threshold capabilities are often associated with technological infrastructure, financial stability, legal compliance, operational efficiency, and basic customer service. Essentially, these are the capabilities that a company needs to be in the game and survive (Amankwah-Amoah and Adomako, 2019; Lin et al., 2020).

Core competencies are unique strengths or abilities that distinguish a company from its competitors and contribute to its long-term success (Alvarenga et al., 2019). These competencies are often rooted in a combination of knowledge, skillsets, technologies, processes, and resources that are strenuous for competitors to imitate or replicate. Core competencies give a firm competitive edge by enabling the creation and delivery of value to customers in a difficult way for others to match (Eizaguirre, García-Feijoo, and Laka, 2019; Marom and Lussier, 2021). They form the foundation for the development of new services and products and are typically aligned with the company's strategic goals and objectives. While core competences offer a sustainable competitive advantage and contribute to long-term success, threshold competencies are essential for surviving in the industry. Companies can differentiate themselves in the market, raise entry barriers, and perform better by identifying and leveraging their core competencies (Luo, Yu, and Zhou, 2021; Tognetto et al., 2019).

One essential aspect of strategic capabilities is the ability to marshal resources and competencies in the organization's overall strategy. This involves leveraging internal strengths while mitigating weaknesses, identifying and developing core competencies, and allocating resources in a way that maximizes value creation (Menchini, Russo, Slavov, and Souza, 2022; Nusair, Al-Azri, Alfarhan, Al-Muharrami and Nikhashemi, 2022). Recent studies have emphasized the significance of strategic capabilities in the current corporate landscape and their relation to the firm's output. Teece et al. (2018) found that an entity's ability to adapt and thrive in a dynamic environment is greatly influenced by its strategic capabilities. The authors make the case that businesses must develop dynamic capabilities, a subset of strategic capabilities that allows them to identify dynamic market conditions and reconfigure them by rearranging their resources. A study by Barney and Hesterly (2019) further highlights the need for strategic capabilities for the firm's long-term performance. They argue that firms with strategic capabilities possess unique and valuable knowledge, insights and assets and, hence, have a higher chance of outperforming their rivals in the long run.

1.1.2 Sustainable Performance

Performance estimates how effective a company is regarding its financial, social, environmental and operational metrics. It also refers to how well an entity attains its market-oriented goals and objectives as set out in the strategic plan (Taouab and Issor, 2019). Sustainable performance is the ability of an entity to operate in such a way that it ensures long-term success whilst maintaining economic viability, social responsibility, and environmental stewardship. It entails balancing the financial performance of an organization with contributions to the well-being of the environment and society at large (Heim, Vigneau, and Kalyuzhnova, 2023). That typically depends on the caliber of the workforce and how effectively they can utilize the resources at hand to achieve the predetermined corporate goals. Sustainable airline's performance is an essential aspect of business success and can be determined by factors such as market conditions, competition, use of artificial intelligence, and management decisions (Wamba-Taguimdje et al., 2020). Utilizing a combination of economic, social, and environmental metrics, one can assess the performance of an organization. This approach, often considered triple-bottom-line, evaluates a company's success regarding its influence on society, the environment, and its financial performance (Heim, Vigneau, and Kalyuzhnova, 2023).

Economic metrics are utilized to assess a company such as an airlines' profitability and financial performance. Standard economic metrics include revenue, net income, sales growth, return on assets, return on investment, and gross profit margins (Yoo and Managi, 2022). These metrics give insight into a firm's capacity to generate revenue, control expenses, and maximize shareholder value (Santos, Lisboa, Crespo, Moreira, and Eugenio, 2022). One key factor that affects a airline's economic performance is the state of the economy. Economic growth and stability lead to enhanced consumer spending and demand for products, which can boost an airline's revenues and profits. However, during economic downturns, like the COVID-19 pandemic and financial crisis (2008), airlines may experience decreased demand and lower profits (Akgün and Memiş Karataş, 2021; Kumar, 2022).

Another economic factor that affects an airline's performance is the competition level in a given market. Companies operating in highly competitive markets may have to work harder to maintain market share and profitability, while those operating in less competitive markets may have more room to grow (Ferreira, Coelho, and Moutinho, 2020). Airlines prioritizing competition in their strategic decisions also report higher performance regarding enhanced profitability and market share (Kianto, Andreeva, and Pavlov, 2013). Management decisions such as investment in research and development, marketing, and human capital can also affect a firm's economic performance. Investing in these areas can result in creation of new products, increased brand awareness, and a more skilled and motivated workforce, all of which can contribute to enhanced firm performance (Augusto et al., 2014).

Additionally, the role of governance and leadership can also impact sustainable performance. Firms having robust corporate governance often report higher returns on assets and equity. Effective governance and leadership can ascertain that a company's goals align with shareholder and stakeholder interests, thereby promoting a long-term perspective and fostering a culture of innovation and accountability.

The effect of a company such as an airline on society and its stakeholders is measured by social metrics (Scarpellini, 2022). These metrics assess a company's efforts in relation to aspects such as employee satisfaction and well-being, customer satisfaction, and community engagement. The Employee turnover rates and satisfaction surveys, diversity and inclusion measures, customer satisfaction ratings, and social impact evaluations are some examples of estimating the social metrics (Coelho, Jayantilal, and Ferreira, 2023)—these metrics aid in assessing a company's social responsibility commitment and capacity to provide advantageous societal results.

Environmental metrics assess a company's sustainability efforts and environmental impact (Peiró-Signes, Cervelló-Royo, and Segarra-Oa, 2022). Airline's efforts to lessen its carbon footprint, save resources, and embrace environmentally friendly practices are gauged by these criteria. Some examples of environmental metrics include greenhouse

gas emissions, waste production, energy use, water use, recycling rates, and renewable energy resource utilization (Heim, Vigneau, and Kalyuzhnova, 2023).

The economic, social, and environmental metrics give insights into an airline's commitment to sustainable business practices and environmental stewardship as highlighted in IATA Airline's Sustainability Reporting Handbook (ASRH) guidelines (IATA, 2024). Stakeholders can thoroughly comprehend a company's performance and overall sustainability by taking economic, social, and environmental metrics into account collectively. This all-encompassing strategy promotes long-term success and positively influences society and the environment by encouraging corporations to strike a balance between profitability and social and environmental responsibility hence the adoption in this study.

1.1.3 Airline Industry

The airline industry is vital to both the production and consumption phases of the global economy as it boosts international tourism and makes transcontinental supply networks more efficient (OECD, 2020). The airline sector is lauded for facilitating global integration and rapid development through its involvement in the flow of commodities, people, capital, technology, and ideas and for its complementarity and substitutability with other kinds of transportation (IATA, 2020). Despite developments in the past decade, the global airline industry faces several competitive threats and obstacles that require airlines to implement a turnaround strategy to stay competitive. These obstacles include government actions, powerful labour unions, significant investments in aircraft equipment, air traffic, fuel prices, and competition. Others include regulations, stability, and weather, significantly impacting global airline industry operations (Amankwah-Amoah, 2020; Bouarfa, Blom, Sharpanskykh and Belhadji, 2021). Commercial airlines operate in a highly cut-throat environment (Kahavya, 2015). In the last 20 years, the airline industry has had a far-reaching paradigm shift in the trend toward expanding domestic and international services (Howe, Chauhan, Soderberg, and Buckley, 2021). Competitive threats from multinational airlines and external shocks have increasingly made commercial airlines conscious of their vulnerable state, and as a result, that has

incentivized them to engage proactively in efforts to ascertain their sustainability in the prevailing turbulent times (Khan, Hassan, Fahad and Naushad, 2020; Penela and Palma, 2023). The COVID-19 pandemic and an upswing in global fuel prices significantly affected airlines' performance globally. Cargo markets have gained ground on pre-COVID pandemic volumes. That attests to the pivotal role of air cargo in transporting life-saving medical equipment and e-commerce delivery during the lockdown period. However, the airline's passenger markets are yet to convalesce from the COVID-19 pre-crisis levels. The passenger traffic is recovering, albeit slowly. However, it still lags behind the rebound of the global economy (IATA, 2022: Fontanet-Pérez, Vázquez, and Carou, 2022).

European airlines, for example, display the most significant breakeven load factors among all other parts of the world, which face difficulties. European airlines confront intense competition in the open market on the continent, but they continue to struggle with high regulatory expenses, inefficient infrastructure, and onerous taxation that impact their performance (Button, 2016). Despite having the second-highest load factor, European airlines nevertheless do poorly financially (Amana, 2015). On the other hand, the American airline industry is struggling with operational issues that have compelled certain airline businesses to leave the market due to sub-par performance and fierce competition. Since 1978, an average of six US airlines have been bankrupt annually. In the USA, four airlines, namely Braniff, Tran, Continental, U.S. Airways, and World Airways, have filed for bankruptcy since the Airline Deregulation Act was implemented (Townsend, 2014). In response to increment customer focus, trends in airline's economic, social, and environmental performance dynamics are continuously being shaped by a complex interplay of strategic capabilities that entail the availability of resources and the level of competency within the airline.

Strategic capabilities have historically had a notable effect on the performance dynamics of airlines all over the globe (Al-Hawary and Al-Rasheedy, 2021). Airlines have had to navigate and assess performance trends to maintain competitiveness and meet evolving stakeholder expectations (Shang, Chen, and Li, 2020). Norman, Artz, and Martinez (2017)

examined US airlines and compared their strategies during unregulated and regulated eras. The outcome showcased that firms were likely to differentiate themselves from one another as a response due to increment customer focus when the market is deregulated. While several factors have historically affected airlines' performance dynamics across the globe, economic, social, and environmental conditions have had the most impact. Economic conditions entail fuel price fluctuation, staff costs, aircraft maintenance, and technical operations costs, which are primary factors that significantly drain an airline's budget while significantly exerting a robust impact on its operational performance.

As consumer expenditure on travel rises in times of economic strength, airlines often perform well; yet, during times of recession or economic downturn, they may struggle. For instance, the airline industry was severely impacted by the financial crisis that occurred in 2008 and the Covid pandemic, where many airlines were compelled to reduce capacity and expenses to remain viable (Belobaba, Odoni, and Barnhart, 2015; Nguyen, Phan, and Ngo, 2022). Fuel prices have significantly impacted the performance of airlines. One of the most significant expenses for airlines is fuel, and rising fuel costs can negatively affect their bottom line. For instance, several airlines battled to remain profitable in 2011 and 2022 when fuel prices hit record highs; some were compelled to reduce capacity and hike air ticket prices to compensate for the incrementd fuel costs (Berghöfer and Lucey, 2014; Samunderu, Perret and Geller, 2023).

Another economic element that has historically impacted the performance of airlines is the nature of their competition. Airlines that operate in highly competitive marketplaces frequently have smaller profit margins and may need to adjust continuously to shifting consumer demands and rivals' pricing strategies (Hannigan, Hamilton, and Mudambi, 2015). The emergence of a low-cost carrier has significantly changed the airline industry in the past decade. Low-cost carriers typically operate at lower costs and provide lower fares than traditional airlines, increasing competition and putting pressure on traditional airlines to change their business models (Abdelghany, Abdelghany, and Azadian, 2017).

Government directives can also play a pivotal role in airline performance and profitability. Government policies on air travel and taxes can affect the cost of airfare and demand for air travel. When governments impose taxes on air travel, it can lead to an upswing in the cost of airfare, resulting in a decrease in consumer demand and lower airline revenues (Morrell, 2021). Terrorism and other global events can also affect the performance of airlines. Following a terrorist attack or other major global events, consumer demand for air travel may decrease, resulting in lower airline revenues. In the past decade, the COVID pandemic and the Ebola virus have significantly affected the airline industry. With lockdowns, travel bans, and quarantine measures, the demand for air travel decreased dramatically. This caused a massive decrease in airlines' revenues; many were forced to ground their fleet, furlough staff, and seek government aid. The industry is still recovering from the pandemic, and the future of the industry remains uncertain (IATA, 2023; Thepchalerm and Ho, 2021).

Socio-metrics also affects airlines' performance across the globe. They include employee satisfaction and engagement, customer satisfaction, safety records, diversity and inclusion, and corporate social responsibility to the community (Ziebaand Johansson, 2022). For their operations, airlines rely on committed and motivated personnel. The commitment and morale within an airline can be determined by staff engagement and satisfaction measures, including employee turnover rates, employee satisfaction surveys, and training expenditures. Better customer service, operational effectiveness, and overall success are frequently associated with more staff engagement. Customer satisfaction is a crucial metric for airlines because it directly impacts their reputation, brand loyalty, and client retention. Customer satisfaction surveys, Net Promoter Scores (NPS), and customer complaint resolution rates are just a few metrics that may be used to measure how effectively an airline satisfies the needs of its customers in terms of comfort, service quality, timely performance, and overall experience. Safety is a critical priority for both airlines and passengers. Social safety measures like accident rates, incidents, and adherence to airline sector laws impact consumer confidence and trust. Performance is often superior for airlines with a solid safety record and proactive safety measures.

Metrics pertaining to diversity and inclusion, such as the gender and ethnic diversity of management and staff, can demonstrate an airline's dedication to fostering a welcoming environment. The performance and innovation of airlines are likely to improve when diversity is prioritized, and an inclusive culture is fostered. Airlines also affect the areas they serve, especially through charity activities, economic development, and job creation. Metrics that evaluate an airline's involvement in the community, CSR initiatives, and economic support for the region can show how committed they are to being good corporate citizens. Online reviews and other social metrics that measure reputation and brand perception, like media sentiment analysis and social media sentiment, can directly impact customer behaviour and an airline's competitive position. Positive impressions of an airline's brand and reputation influence customer loyalty, competitive advantage, and overall performance (Amankwah-Amoah, Khan, and Osabutey, 2021; Gössling, Scott, and Hall, 2020). As a result, airlines closely monitor and adapt to these factors to remain competitive.

Also, environmental factors have had a sizeable impact on airlines' performance. The proliferation of airlines and airport use over the past several decades has resulted in concomitant emissions of air pollutants. Due to the documented link between exposure to the air pollutants and incremented harmful effects on people's health, airlines have had to adjust their policies to align with ESG-sensitive customers to remain competitive (Brtnický et al., 2020). Due to their massive handling of jet fuel and deicing chemicals, airports damage the environment by polluting the neighboring water bodies. The ozone and the ultrafine particles released by airline activities are toxic to humans. General aircraft piston engines burn avgas, releasing hazardous lead into the atmosphere. As a result, many passengers concerned with environmental conservation shun airlines using planes that are heavy polluters of the environment. (Chen, Cheng, and Zhu, 2021; Christodoulakis et al., 2022; Moolla and Johnson, 2019). Climate change, to which airlines contribute a significant portion, has also created warmer, drier conditions, leading to increment drought and a longer fire season, exacerbating wildfires that affect air transport activities, more so in Europe and the Americas. Additionally, leading to cancellations and delays, negatively impacting airlines' performance (Graham, 2018).

Africa's airline industry is overburdened with taxation and circuitous routes, making it difficult to set lower ticket prices and restricting awareness of its tremendous potential for traffic growth and performance (Kahavya, 2015). In 2022, African passengers were 1.9 per cent of the air travel market despite hosting 16.75 percent of the world's population. However, African Airlines enhanced their capacity by 78 per cent and achieved a 16.4 per cent increment in the average load factor per flight in the same period, taking it to 68.4 per cent. However, this is the lowest among all regions worldwide despite the existing potential for more growth (IATA, 2022). That is necessitated by the fact that many African countries continue to restrict their skies to protect state-owned air carriers. Single African Air Transport Market was created to hasten the Yamoussoukro Declaration implementation, which called for improving connectivity throughout the continent to sustainably develop the tourism and airline sectors and contribute significantly to economic growth, job creation, prosperity, and African integration. It was decided that for the market to develop quickly, nations and airline regulators must permit African carriers to access their markets (AU, 2018). However, a lot has been stated, but not nearly enough has been done to put the Yamoussoukro Decision into practice. Regarding market capacity and potential, intercontinental capacity by African airlines to and from Africa now stands at 36.4%, compared to 63.64% by non-African carriers. Therefore, Africa's untapped regional and domestic markets provide African airlines with the strongest potential for growth and expansion to enhance their performance (AFRAA, 2022).

1.1.4 Airline Industry in Kenya

Compared globally, Africa's airline industry continues to perform below average (IATA, 2022). Nevertheless, demand for air travel has grown consistently in recent years as passenger and freight traffic expanded. In 2022, the demand for air travel grew by 27.4% (AfDB, 2019; IATA, 2022). The airline sector around the world is thought to be weakest in Africa. Profits in the last decade have hardly been encouraging. Due to slightly greater yields than the average and lower expenses, the continent's breakeven load factors are

quite low. However, only a few regional carriers, notably Ethiopian Airlines, have achieved good load factors.

The issues have been substantial for other airlines in the area, including Egypt Air, Kenya Airways, Air Algerie, Air Maroc, and Tunisair, and most are still working on restructuring strategies to turn around their fortunes (MacDonald, 2017). The African airline industry expansion is affected by a poor security and safety record, dilapidated infrastructure, inadequate resources, circuitous routes, and a lack of regulation and government frameworks. Also, closed airspaces and limited trade agreements are amongst the major bottlenecks facing the industry's connectivity on the continent. These constraints then compound the high operational costs due to volatility in petroleum prices and stiff competition. As a result, they exacerbate the airlines' poor performance, hence necessitating a turnaround strategy to help them recover from the decline (Dafa'Alla, 2016).

In Kenya, the airline industry contributes 4.6 per cent to the GDP, supporting over 410,000 jobs. In the next two decades, Kenyan airline market will be twice as big, which may result in an increment of 11 million passengers using air transport, in addition to the creation of over 450,000 more jobs. This is also expected to boost the GDP up to the tune of US \$11.3 billion by 2037 (IATA, 2019). However, commercial airlines in Kenya have had mixed fortunes regarding performance in the past. The financial performance of many commercial airlines continues to record dismal outcomes in the last decade, with these firms registering significant reductions in their gross profit margins compared to their counterparts in the region, such as Ethiopian Airlines (Kasomba and Omagwa, 2020). Furthermore, European and Middle Eastern carriers dominate the Kenyan sky, edging out the national carrier, Kenya Airways (Farah, Munga, and Mbebe, 2018). In the past decade, commercial airlines in the Kenyan space have been hit by numerous bottlenecks that may have impacted their performance regarding sales growth and Passenger Revenue per Available-Seat-Mile. These challenges include high operational costs, stiff competition from other carriers, and financial mismanagement.

In response to increased customer focus, trends in the airline's economic, social, and environmental performance dynamics are being shaped by a complex interplay of strategic capabilities that entail the availability of resources and the level of competency within the airline. This has necessitated them to make a paradigm shift in operations to improve their performance (Kariuki, 2017). To reduce costs, distinguish their products, and broaden their market, commercial airlines have developed innovative ways to implement strategic capabilities to improve their economic, social, and environmental performance (Farah, Munga, and Mbebe, 2018; Muia, 2017). However, the existing literature on effect of these strategic capabilities on the performance of commercial airlines in Africa is thin (Chelanga, Rono, and Boit, 2017). Most studies have focused their attention on North America, Europe, and Asia, where we have the largest share of passenger and cargo traffic (IATA, 2022). Therefore, the study investigated strategic capabilities and how they exert influence on performance of airlines in Kenya.

1.2 Problem Statement

The globalization of the economy and rising consumer demand for high-quality services at a good value have created an extremely competitive market for the airline sector. Since the advent of globalization and open sky rules, airlines have faced fierce competition, which have an impact on their performance (Chen, Chen, and Zhu, 2021; Christodoulakis et al., 2022). That has necessitated global airlines to devise various competitive strategic capabilities to enhance performance. Compared to the world, Africa's airline industry performance is below average in market share and profitability (Abate, Christidi, and Purwanto, 2020). Nevertheless, the demand for air travel has grown consistently lately as passenger and freight traffic have expanded (IATA, 2022). Stiff competition by commercial airlines for the market share has necessitated restructuring to cut costs and remain competitive. Competitive threats from multinational players across the globe have also made commercial airlines in Africa more aware of their exposure, encouraging them to actively engage in strategic capabilities to enhance their performance and sustenance (AfDB, 2019; Al Amin and Maina, 2020).

In Kenya, several challenges face the local airlines, including high fuel prices, safety records, cost control, internal liberalization, access to capital markets, lack of skilled

labour fleet replacement, high taxes, and an uncondusive business environment (Bosibori, 2012). Kenya's airline industry has undergone many regulatory reforms for the past decade to turn the tide. These reforms have necessitated several structural changes, encouraging many investors to delve into the industry to fill in the existing demand for air transport (Farah, Munga, and Mbebe, 2018; Ng'ang'a, 2012). To effectively harness and leverage the existing opportunities to remain competitive in the market, Kenya's commercial airlines continuously implement strategic capabilities to enhance their performance (Kahavya, 2015). However, the literature linking the strategic capabilities adopted and performance of the entire commercial airline industry is thin, with the existing studies focusing on competitive strategies, and how they influence airline performance in Kenya (Kyalo, 2016; Ochieng and Ahmed, 2014). Also, most of the existing studies focuses on a specific airline or a specific metric within the airline that affects its performance, such as economic metric- staff remuneration and outsourcing some of the airline's operations. Also, the extant literature has not provided a holistic methodological approach that measures economic, social and environmental performance of airlines (Mwangi and Kanyanjua, 2019; Mwangi and Ragui, 2013; Nyaga and Simiyu, 2018). Therefore, this study sought to fill that gap in this area by examining how strategic capabilities (tangible resources, intangible resources, threshold competencies, and core competencies) affect the economic, social, and environmental performance of commercial airlines in Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

To examine the effect of strategic capabilities on performance of commercial airlines in Kenya.

1.3.1 Research Objectives

- i) To determine the influence of tangible resources on the economic, social and environmental performance of commercial airlines in Kenya.
- ii) To investigate the influence of intangible resources on the economic, social and environmental performance of commercial airlines in Kenya.

- iii) To determine the influence of threshold competencies on the economic, social and environmental performance of commercial airlines in Kenya.
- iv) To determine the influence of core competencies on the economic, social and environmental performance of commercial airlines in Kenya.

1.3.2 Specific Questions

- i) What is the influence of tangible resources on the economic, social and environmental performance of commercial airlines in Kenya?
- ii) What is the influence of intangible resources on the economic, social and environmental performance of commercial airlines in Kenya?
- iii) What is the influence of threshold competencies on the economic, social and environmental performance of commercial airlines in Kenya?
- iv) What is the influence of core competencies on the economic, social and environmental performance of commercial airlines in Kenya?

1.6 Scope of the Study

The scope of this particular study was guided by the theory of strategic balancing, which is founded on the premise that a firm's performance is affected by several strategic capabilities it undertakes. The theory explains how firms can achieve and maintain a competitive edge by balancing strategic capabilities and goals to attain a competitive edge, gaining a position of strength. The study examined how strategic capabilities (tangible and intangible resources, threshold, and core competencies) influence commercial airlines' performance in Kenya through a cross-sectional study. The study's data was collected by administering a researcher-administered questionnaire to respondents, which comprised customer service, marketing, operations, finance, and aircrafts maintenance management staff of commercial airlines in Kenya. The study was conducted between March, April and May 2024. Data was analysed using SPSS 23 and Excel.

1.7 Significance of the Study

A few existing theories touch on strategic capabilities and how they affect commercial airlines' performance across the globe. Most theories focus on competitive strategies adopted and how they impact the airline's performance in general. However, different

industries react differently to strategic capabilities due to their diverse nature and the market composition they serve. This study contributed to improving existing theories on strategic capabilities and firm performance. The study also contributed towards developing new theories that explain how strategic capabilities can affect performance of domestic commercial airlines which could help domestic commercial airlines enhance their performance.

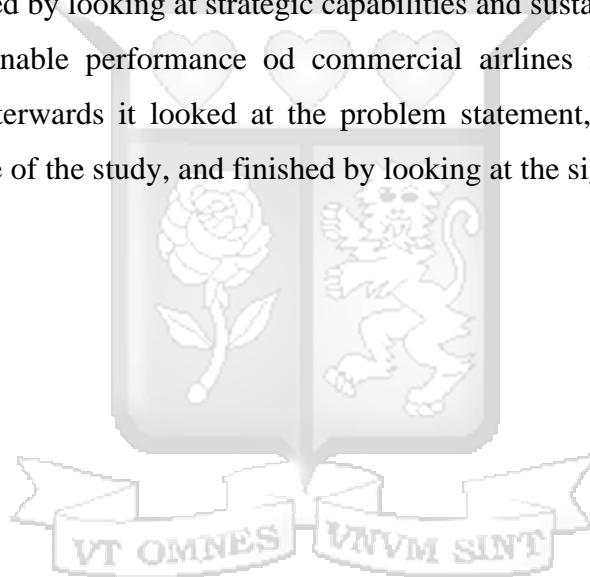
The study's results gave a better understanding of how strategic capabilities that firms adopt drive organizational performance. Scholars can then use the study findings to do further research on relevantly related topics such as cargo logistics in domestic commercial airlines. To commercial airlines in Kenya, the study provided a holistic and objective analysis of their competition in to maximize their returns to shareholders through enhanced economic performance. This research provided an evaluative and diagnostic study of the Kenya's airline industry to enable the government create forward looking policies to enhance airline performance. The study findings can also be further utilized by the domestic commercial airlines to shape their strategies in the future to expand their reach in other service areas that have been neglected such as expansion of routes to secondary cities. The study also provided direction to potential investors who may be inclined to invest in Kenya's airline industry. It is also relevant in providing insight for those who might want to expand their investment in the airline industry in the country. This study also contributed to existing literature on the impact of strategic capabilities on the airline industry's performance.

This study was essential in providing updated policies in the policy space on how commercial airlines can leverage strategic capabilities to enhance performance. The study developed policies to accelerate the utilization of strategic capabilities by Kenya's commercial airlines to boost their economic, social, and environmental performance, market share, or diversification of their products to meet a specific market niche. This research also gave policy insights into how strategic capabilities have altered in response to the current competitive obstacles that local airline companies must overcome. The study also provided an up-to-date evidence data on how strategic capabilities have affected firms

in the airline industry in Kenya. Additionally, challenges facing domestic commercial airlines' performance were examined, and solutions were given to enhance their performance. The study results were pivotal to future scholars by forming a basis for further examination. Academic scholars are expected to utilize the study as a basis for further brainstorming on how strategic capabilities adopted by commercial airlines enhance their performance. For researchers who undertake research in the same area, the study was a source of information in their studies in future.

1.8 Chapter Summary

The chapter stated by looking at strategic capabilities and sustainable performance. Then looked at sustainable performance of commercial airlines in the world and Kenya, respectively. Afterwards it looked at the problem statement, the general and specific objectives, scope of the study, and finished by looking at the significance of the study.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter reviewed literature on strategic capabilities and performance in various countries and sectors. The first part looked at the theoretical literature on strategic capabilities. The next part looked at the empirical literature on the subject and research gaps emanating from theoretical and empirical reviews.

2.2 Theoretical Review

This part examined the strategic capabilities and performance. The study specifically examined the dynamic capability theory, resource-based view theory, the strategic balancing theory.

2.2.1: Dynamic Capability Theory

The theory was put forward by Teece et al. (1997). The theory states that a company's success depends on its capacity to integrate, develop, and reconfigure external and internal competences to create new types of competitive advantage. According to the theory, firms must constantly improve and grow their capability to adapt to unpredictable environments. These capabilities encompass tangible resources, such as technology, physical assets, and intangible assets, such as knowledge and skills. According to the theory, dynamic firms have three essential characteristics: sensing, seizing, and reconfiguring. The ability of a business to recognize and interpret alterations in the external environment, such as market trends, consumer needs, and emerging technologies, is referred to as sensing. The ability of the company to proactively take advantage of new possibilities and deploy resources wisely to capture value is referred to as seizing. Reorganizing and integrating the firm's resources and processes to adapt to changing conditions is the emphasis of reconfiguring.

According to theory, organizational learning is essential for fostering the growth of dynamic skills. Companies need to engage in exploratory activities to learn new information and skills, try new tactics, and take lessons from triumphs and mistakes.

Through this learning process, organizations can increment their absorptive capacity to successfully recognise, assimilate, and apply gained knowledge. The theory strongly emphasizes senior management's contribution to the development of dynamic capabilities. Any strategic direction of a company is determined by its leaders, who also encourage a culture of innovation and learning and make it easier for various departments and units to collaborate and integrate. Businesses can develop dynamic skills to gain a long-lasting competitive edge. They can develop new products, enter virgin markets, and modify their business strategies to efficiently adjust to shifting market conditions. This theory is particularly relevant in industries such as airline, where internal and external strategic capabilities and capacity to integrate, develop, and reconfigure internal and external competences to create new types of sustainable competitive advantage in economic, social, environmental, and governance metrics can significantly impact performance. One of the primary criticisms of the theory is its conceptual ambiguity. According to Schilke, Hu, and Helfat (2018), the theory lacks a universally accepted definition and operationalization, thus leading to confusion and inconsistency in its application across various studies. The ambiguity makes it challenging to estimate and evaluate the dynamic capabilities accurately. Also, according to Baía and Ferreira (2019) and Helfat (2022), significant resources and time are required to develop dynamic capabilities. He argues that resource-constrained firms, which are often small, may experience significant bottlenecks in investing adequately to build and maintain these capabilities, potentially creating a disadvantage.

2.2.2 Resource-Based View Theory

It was first introduced by Jay Barney (2017). It focuses on the strategic internal resources and capabilities firms can utilize to attain sustainable competitive advantages over rivals in the market. The RBV theory suggests that a company's unique resources and capabilities can be leveraged to create a competitive advantage. This theory also emphasizes how management is key in maximizing resources and capabilities to acquire a competitive edge. The capacity to expand, enhance, or rearrange one's capabilities through time makes them dynamic. This strategy involves identifying and developing the

firm's unique resources and capabilities with intangible assets such as intellectual property, brand reputation, and distribution networks to create a sustainable competitive advantage. Unlike tangible assets such as land, machinery, and equipment, firms take a long time to build their intangible assets. Hence, competitors cannot easily buy these intangible assets from the market. That makes them valuable in gaining market share, product sales, and profitability, as competitors are prohibited from using them.

The theory presents a framework for evaluating the value, rarity, inimitability or uniqueness, and non-substitutability of resources or abilities. By satisfying client wants, cutting expenses, or generating other advantages, resources must bring value to the company's products or services. Resources also ought to be rare or distinctive among competitors. Resources are less likely to result in a competitive advantage if they are widely available. Resources should be difficult for rivals to copy or duplicate. Patents and other concrete elements and intangible elements like a distinctive business culture are included. There should not be an easy way to replace the resource. The competitive edge is lost if a rival can accomplish the same goals using alternative resources. When examining the performance of domestic airlines, the theory is extremely relevant and important. The challenges and complexities of the airline sector are well matched with RBV's focus on harnessing unique and invaluable resources to gain a competitive edge. RBV strongly emphasizes identifying the material and intangible assets that distinguish airlines from rivals. Resources for domestic airlines could include route networks, airport relationships, customer databases, brand reputation, operational experience, and aircraft fleet efficiency. Domestic airlines frequently compete fiercely and have little profit margins.

RBV's concentration can strongly impact the airline's financial performance on assets that enable cost efficiencies, such as improved operational procedures, fuel-efficient aircraft, and streamlined ground services. The focus placed by RBV on intangible assets like brand reputation and customer loyalty is quite pertinent. Strong brand recognition and satisfied customers help airlines draw in and keep travellers, which improves financial success. Airlines with resources that support environmentally friendly procedures might position

themselves as leaders as sustainability develops significance, appealing to environmentally conscientious travellers. The dynamic capabilities notion of RBV theory is consistent with the significance of organizational learning and development in the airline sector. In a competitive market, it is crucial to learn from mistakes, analyze performance data, and adjust plans accordingly.

The RBV assumes that the resources are immobile or difficult to replicate; however, critics of the theory state that this is not always the case. According to Barney, Ketchen, and Wright (2021) and Utami and Lamanos (2022), some resources may be easier to transfer, acquire, or imitate in the current interconnected world. That challenges the sustained competitive advantage assumption. Other critics, such as Peteraf and Tsoukas (2017) and Gaya (2016), argue that the theory overly emphasizes the internal resources and capabilities of the firms at the expense of external factors such as industry structure, market dynamics, and environmental change dynamics, which have a sizeable impact on firm's performance.

2.3 Empirical Literature Review

The section examined the existing empirical literature on strategic capabilities and how they affect commercial airline performance. Specifically, this section looked at strategic capabilities, tangible and intangible resources, core and threshold competencies, and how they affected commercial airline's economic, social, and environmental performance.

2.3.1 Tangible Resources and Airline Performance

Research on the factors influencing economic operational efficiency and its effects on economic performance in India's airline sector was conducted by Saranga and Nagpal (2016). They conducted a two-stage empirical analysis. First stage entailed operational efficiencies estimation using Data Envelopment Analysis, while the second stage involved identifying performance drivers using two-way GLS regression. According to the results, low-cost airlines in India managed to generate sizable operational economies, even though several structural and regulatory issues have an unfavorable effect on airline performance. Additionally, the study revealed that, although many factors influence cost

efficiency, it is technical efficiency that, in the case of the Indian airline business, improves market performance through pricing power and has achieved substantial operational efficiencies. Moreso, the study found that, while various factors drive cost efficiencies, better market performance is realized via technical efficiency through pricing power in the country's airline industry. Based on importance of performance evaluation in the airline industry, research by Kirac and Bakr (2020) examined the performance of 12 airlines from the Star Alliance worldwide alliance. Twelve Full-Service Carriers (FSCs) were assessed using 20 financial and airline-specific performance indicators for 2015–2017. In the study, an integrated CRITIC and CODAS methodology was suggested. A sensitivity analysis was also carried out following the application to check reliability and consistency of findings. The study's outcome indicates that financial rather than operational metrics had a greater influence on performance, with Singapore Airlines (SIA) emerging as the top carrier.

Mwangi (2013) also examined the effects of macroeconomic variables on the Kenya's airline industry's financial performance. The financial performance estimates were Return on Assets regressed against GDP growth rate, real exchange rate (USD and Kenya shilling), money supply (M3) change, inflation, and Central Bank's average annual lending rates. This study utilized a descriptive correlation design. The population comprised 109 licensed airlines operating in Kenya. Return on Assets (ROA), an economic performance metric, was regressed against real exchange rate, the GDP growth, money supply (M3) change, average lending rates (annual) as calculated by Central Bank of Kenya. The inflation rate, as estimated by the annual percentage changes in consumer price index, was the financial performance metric used by companies in the airline industry. The research design was descriptive correlation with 109 legitimate airline businesses having operating licenses in Kenya making up the population of this survey. The study discovered that macroeconomic variables exerted a positive impact on the ROA of the airlines influenced.

Njeri and Susan (2018) investigated how the macroenvironmental factors affected the economic and social performance of Kenya's airline sector. Due to budget limitations,

study only covered two financial years. It used a descriptive research approach. The study's target population was Kenya Airways' 245 finance department workers. By employing a stratified sample technique, 74 respondents were selected at random. The study used a questionnaire as its main tool for gathering data. The study's results indicate that tangible and intangible factors did have an effect on the economic and social performance of Kenya Airways.

2.3.2 Intangible Resources and Performance

Alexander (2018) examined the nexus between organizational performance and intellectual capital in the US airline sector. The objective of the quantitative correlational study was to investigate relationship between the self-reported and measured use of intellectual capital in addition to financial success of the American airline sector. Through a self-report online survey, executives from mainline, regional, cargo, charter, and commuter airline firms in the US submitted information on using intellectual capital. Additionally, intellectual capital information was gathered from the airlines' financial records. The Value-Added Intellectual Coefficient approach and theoretical framework were used to measure airline sector performance. The predicted association between variables was examined using the Spearman rank correlation. The findings showed a substantial, statistically significant correlation between the airline financial performance and its use of intellectual capital.

Saranga and Nagpal (2016) studied the drivers of operational efficiencies and its impact on India's Airline industry market performance. They did a two-stage empirical analysis, with the first stage using the Data Envelopment Analysis and second stage using GLS regression. The findings showcase that whereas some of the regulatory and structural factors do have an unfavorable effect on airline's performance, India's low-cost carriers have managed to attain substantial operational efficiencies. Furthermore, the study found out that, while the cost efficiency was driven by several factors in India's airline industry, only technical efficiency enhances economic performance via the pricing power.

Research on the factors influencing operational efficiencies and its effects on Indian airline's sector market performance was conducted by Saranga and Nagpal (2016). They conducted a two-stage empirical analytics. According to the results, low-cost airlines in India managed to generate sizable operational economies, even though several structural and regulatory issues unfavorable affect airline performance. Additionally, the study revealed that, although many factors influence cost efficiency, it is technical efficiency that, in the case of the Indian airline business, improves market performance through pricing power and has achieved substantial operational efficiencies. The study found that, while various factors drive cost efficiencies, technical efficiencies ascertain better market performance via pricing power for the airlines.

Using Technique for Ordering Preference by Similarity (TOPSIS) to Ideal Solution(s), Barros (2015) looked at 29 African airlines' efficiency from 2010 to 2013. Similar to DEA, TOPSIS is a multi-criteria technique that ranks a finite collection of units based on minimization of distance from an ideal point and distance maximization from an anti-ideal point. In this study, TOPSIS is utilized in the first stage of a two-stage methodology to evaluate the relative effectiveness of African airlines using the most popular metrics used in the airline's literature. In second stage, neural networks and TOPSIS findings are integrated to create an airline performance model with strong predictive power. The findings show that network size-related variables, or scope economies, are crucial in predicting Africa's airlines efficiency levels, however the influence of fleet mix and public ownership should not be disregarded. The assessment of airline effectiveness made possible by TOPSIS reveals significant differences between airlines economic and social performance. Air Seychelles was rated highest, receiving a score of 0.72.

Rugendo (2022) researched the effects of globalisation on the airline industry's competitive advantage, using Kenya Airways as a case study. The study concentrated on how Kenya Airways' competitive advantage is influenced by joint ventures, strategic alliances, and multidomestic strategies. Resource-based and service marketing view theories influenced the research, which employed a descriptive approach. Kenya Airway's operational managers and departmental heads comprised the study's population.

Questionnaires were utilized to gather data, and quantitative methods were used for analysis. Correlation analysis showed a high positive correlation between airline company competitive advantages and strategic alliances, joint ventures, and multidomestic strategy. Cheptarus (2017) investigated how different internalization strategies affected the performance of Kenyan airline companies. The study's goal was to identify the various internalization strategies used by Kenyan airlines and to demonstrate a link between these strategies and airline performance in Kenya. Three theories: electric paradigm theory, the market defects theory, and transaction cost analysis model, served as the foundation for this work. The study used descriptive research design and focused on 66 Kenyan airlines. To mine primary data, a semi-structured questionnaire was created. The data were examined using SPSS. The findings demonstrated a positive and significant relation between airline company performance and export modes of internationalisation. The findings also showed a strongly favorable association between airline company economic performance and investment entry types of internalization.

2.3.3 Threshold Competencies and Performance

Although the literature is thin on the direct effects of threshold competences on commercial airline performance, it is widely acknowledged that having and effectively deploying threshold competencies is essential for airline success. Pearson et al. (2015) examined how the strategic capabilities, namely threshold competencies of Asian network airlines differ by Asian sub-region and airline performance to compete with low-cost carriers. Utilizing ATA-commissioned methodology that was put into place by O'Connell and IATA, performance was analyzed in two ways: by perceived performance and actual performance. The findings demonstrate that different LCCs have different levels of strategic capability, with SilkAir having the lowest level and Vietnam Airlines having the most. Batouei et al., (2019) looked into the impact of airline service quality and flight crew competency to determine if flight anxiety and satisfaction are correlated with traveler loyalty. Partial least squares were used to evaluate the suggested conceptual model using actual data from 262 travelers. According to the findings, both flight anxiety and traveller pleasure are substantially correlated with the flight crew's skill and level of service. While

it was discovered that traveller happiness impacted loyalty, the link between flight anxiety and loyalty was not established.

At Thailand's Suvarnabhumi Airport, Wattanacharoensil and Yoopetch (2012) investigated Thai competences in terms of human resources and quality of services on ground operations of the airline sector. The results show that many Thai employees who participated in the study have high levels of competency, but they also identify a number of areas that need management development. The usage of handling agents was also noted in the findings as a significant aspect that might have an impact on standard of airline service—in a sample of four major airline organizations in Jordan, Hawi, Alkhodary, and Hashem (2015) investigated the nexus between management competences and performance of the firms. 100 mid-level managers from various departments of the Jordanian airlines made up the sample. The instruments' reliability was evaluated using Cronbach Alpha test. The one-way ANOVA Stepwise was employed for ranking purposes in the study to establish the impact of managerial competences (leadership, problem solving and decision making, strategic planning, and client focus) on performance with its dimensions. Results revealed positive correlation between effectiveness of the airline's organization and all of the abilities such as strategic competency, problem-solving, leadership, and customer focus. Airline leadership innovation was specifically tied to strategic competency, while customer focus was linked to the competitive advantage of the firm.

Asiegbu et al., (2012) explored how regulatory compliance, safety measures, and customer satisfaction offered by airline operators in Nigeria's airline business affected the effectiveness of their marketing. They used a cross-sectional survey study methodology in their empirical review. The study's database, which included 29 commercial airlines operating in Nigeria as of February 2012, was created using stepwise regression and Pearson correlation statistics. The study concluded that regulatory compliance, safety measures, and customer satisfaction offered by airline operators in Nigeria's airline business affected the effectiveness of their marketing. Notably, sales growth, profitability and their market share strongly correlate with the ambiance at the work place, staff competency, and niche service systems design. Mwikya and Angeline (2018) focused on

the Kenyan air transport industry performance and the adoption of airline safety standards. Based on a conceptual analysis of the literature on the connection between the performance of air transport and the oversight of the application of airline standards. The reviewed literature makes it clear that monitoring the airline safety standards implementation, which includes ongoing training programmes, appropriate and thorough certification processes for airline personnel, airline infrastructure(s), and proper management of data on airline concerns and safety procedures are crucial to ensuring the operational performance of the Kenya's air transportation sector. Also, Mwangi (2011) conducted research to ascertain how macroeconomic factors affected the Kenyan airline industries' financial performance. Return on Assets (ROA), a financial performance indicator for businesses in airline sector, were regressed against macro factors such as the Ksh and US\$ real exchange rate, the GDP growth, money supply (M3) changes, lending rates (annual) as calculated by CBK, and inflation rate as measured by annual CPI percentage changes. A descriptive correlation research design was adopted. A total of 109 legitimate airlines with operating permits in Kenya from 2008 to 2012 made up the population. The findings showcased that the return on assets of enterprises in the airline industry had a positive but insignificant relation with the GDP growth rate (0.102) and the annual money supply change (0.122). Additionally, the research revealed that ROA had a weakly negative, negligible association with the exchange rate (-0.082), the annual average loan rate (-0.041), and the annual average inflation rate (-0.172). The study also demonstrated that macroeconomic factors affected the ROA, with adjusted R^2 (0.019).

2.3.4 Core Competencies and Performance

Because of the fierce competition and dynamic nature of the commercial airline sector, it is essential for commercial airlines to identify and leverage their core capabilities to perform at the highest level. This section seeks to analyze the connection between core competency and commercial airline performance. Boyd and Hollensen (2012) argued that privately airlines operate more effectively than publicly owned airlines. The authors focused on an in-depth analysis of the fundamental causes of privately owned airlines' superior performance compared to publicly owned airlines. One of the significant factors cited by the authors is the airline industry's high absorptive capacity, which results from

flexible management, strong networks, and long-term employee relationships that increment competitiveness and performance of family-owned airlines. The link between innovation strategies and performance of international Technology Services Ventures were examined by Ndubisi et. al., (2015). Data was collated from 200 ITVs which were serving external markets from their countries of origin. Multiple regression analyses using factor and hierarchical structures were used to investigate the relationship. The findings show a significant relation between innovation strategy (which entail service product innovation, administrative innovation and process innovation,) and ITVs performance.

The impacts of innovative initiatives on Turkish civil airline's employee motivation, company performance, and customer happiness were evaluated by Sarigül and Coşkun (2022). It was observed that firms needed to create innovation strategies in order to stay up with the shift in client demands and wants as a result of technology improvement. These innovation initiatives must be developed and put into action in line with the perception, expectations, and performance of company management. Depending on the organizational structure and management viewpoint, several innovation tactics were employed. The study's findings demonstrate that Turkish civil airline's innovation strategies had a positive effect on worker motivation, company performance, and customer happiness while also giving the Turkish civil airline a long-term edge in profit maximization. It was noted that there was a rise in employee motivation as a result of the introduction of innovative strategies. The staff motivation enhanced business performance. It also led to the firm's retaining a competitive advantage and customer loyalty. As a result, these positive effects led to the profit maximization of Turkish civil airline enterprises.

Kim, Kim and Hyun (2016) conducted a study titled "Antecedents of Customer-Centric Innovativeness and Brand Loyalty for US Airlines." To find customer-centric innovativeness triggers related to in-flight services, the study took into account the first-class passenger market. It also looked at the moderating function of advertising effectiveness and the impact of customer-centric innovativeness on brand loyalty. Several theory-based hypotheses were explored in the United States (US) using empirical data

collected from 205 passengers in the first-class. The findings show that perceptions of airline innovation were significantly impacted by a number of experiential aspects of in-flight service designs in first-class passenger market, including flight attendant performance, physical appearance, entertainment, and food.

Additionally, in-flight dining options and flight attendant physical appearance and performance had a moderating influence on how creative an airline was considered by customers. The study's findings demonstrate how brand loyalty among first-class travelers is strongly influenced by innovativeness that is focused on the needs of the customer. While the literature is thin on studies that have explored the nexus between core competencies and commercial airline performance in Kenya, we can draw insights from studies in other regions.

A study on the input-process-output model of the Pilot Core Competencies was conducted by Mansikka, Harris, and Virtanen (2017). The purpose of the study was to structure flight-related core competencies for the professional airline pilots as elements in a framework for team performance and to analyze the relationship between them. A common technique to describing how to perform a piloting job effectively and what a skilled pilot performance looks like in the airline industry is the basic competencies. Through Evidence-Based Training, the pilot's ability is developed and then assessed across a variety of these essential competencies, combining both individual and team-related abilities because flying a commercial aircraft is mostly a team effort (IATA, 2013; ICAO, 2013). The core competencies are said to include the knowledge, aptitudes, and skills required for the profession and, if mastered, offer the pilot the capacity to handle any unanticipated or unexpected real-life scenarios or crises.

To do this, 1,280 pilots' core competency scores from 2,560 Operator's Proficiency Checks missions were examined. All fleets were used to choose. Pilots' performance ratings for each competency were analyzed using the principal component analysis (PCA). A route analysis model was created using the four retrieved primary components as its foundation. The input-process-output model of team performance was applied by the route

analysis using the derived core competences, which was directly tied to the activities on the flight deck. Each competency had a maximum performance score of five and a minimum performance score of one. One of the 157 distinct TRIs the airline uses rated each mission. The PCA and route analysis results showed that the suggested IPO model significantly improved pilot's individual and team performance.

A 2017 study on the input-process-output model of the 1,280 pilots' competencies was conducted by Mansikka, Harris, and Virtanen showed that pilot's individual and team performance were significantly improved by the airline's investment in core competencies.

2.4 Summary of Research Gap

The nexus between airline's strategic capabilities and its performance in the context of domestic operations has garnered interest due to the dynamic and competitive nature of airline industry across the globe. While some research exists on this topic, there are gaps that could be explored further to gain indepth knowledge of how strategic capabilities in unexplored areas such as such as environmental sustainability and social factors such as staff welfare influence domestic airline performance across the globe (Amankwah-Amoah, 2020). The majority of extant studies focus on economic measures such as procurement of strategic routes, purchase of modern aircraft, machinery and equipment and how they affect domestic airline performance while neglecting to integrate social and environmental factors in methodology framework. This approach may lead to biased conclusion(s) given that economic, social and environmental factors captured different attributes and dimensions of an airline's overall performance and prospects (Zhang et. al., 2021).

Therefore, there might be a need for more in-depth exploration of the specific strategic capabilities that are most crucial for domestic airlines but remain largely unexplored such as service quality dimensions, diversity and inclusion, employee well-being (Ramachandran, 2021). With the onset of deadly pandemics such as Ebola, and COVID-

19, airline workers are exposed to the deadly viruses while dispensing their duties which may affect their performance and psychological well-being. As a result, this may also affect the airline's performance. Therefore, understanding which strategic capabilities have the most impact on domestic airline performance could provide valuable insights (Czerny et. al., 202 and Ng et. al., 2022).

The existing literature specifically focusing on African domestic airlines' strategic capabilities and their impact on performance is thin. Many existing studies tend to focus on airlines in more developed regions, leaving a gap in understanding the unique challenges and opportunities faced by African airlines (Abate, Christidis, and Purwanto, 2020). The African airline industry operates within a unique socio-economic, political, and infrastructural context. A research gap exists in understanding how these contextual factors interact with airlines' strategic capabilities and influence their performance outcomes. Due to limited resources, most of the African airlines such as Ethiopian Airline, Kenya Airways, Air Maroc, Egypt Air, South African Airways have adopted different strategies and capabilities compared to airlines in more developed regions. Therefore, investigating how resource constraints shape strategic capabilities and their impact on performance could be an important area of research.

Although some research has been done on strategic capabilities utilized in Kenya's airline industry by domestic airlines, very few have focused on the four strategic capabilities, namely, tangible and intangible resources, threshold and core competencies. Irungu (2012) focused on how ICT influences the performance of Kenya's airline industry. Mwangi (2012) focused on how macroeconomic variables affects the financial performance of Kenya's airline industry. Njeri and Susan (2018) investigated how the macroenvironmental factors affected the performance of the airline sector in Kenya. Mwikya and Angeline (2018) focused on the Kenyan air transport industry performance and the adoption of airline safety standards. Mwangi (2011) also studied threshold competencies and how they affect the airline's operations strategies. He discovered that costs contribute to an organization's strategic advantage. However, none of these studies explored or took an in-depth analysis on how the tangible and intangible resources,

threshold and core influence the performance of the entire domestic commercial airline industry in Kenya.

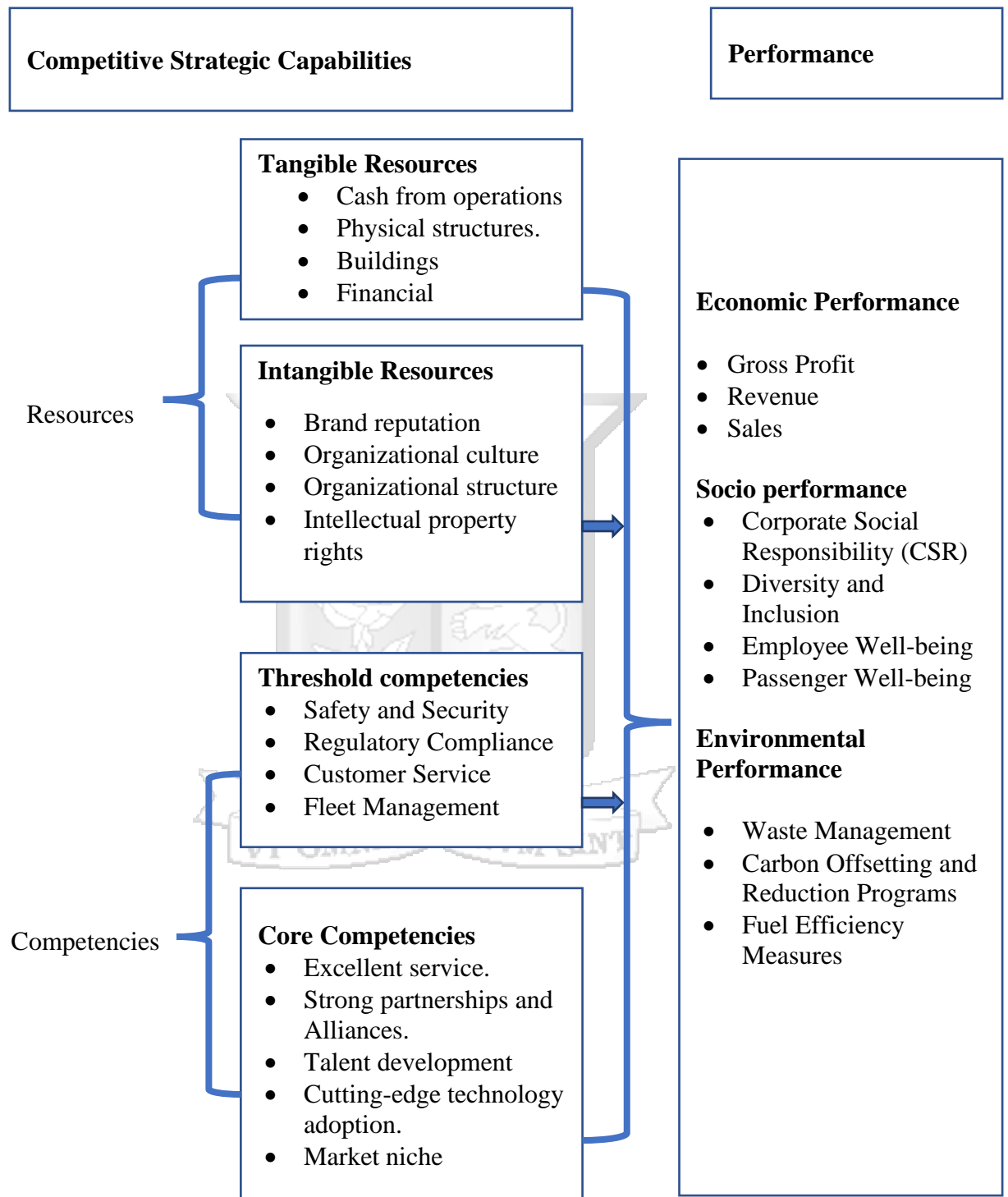
From the literature review, the literature is thin on how strategic capabilities, namely tangible resources, intangible resources, threshold competencies core competencies have influenced commercial airlines social and environmental performance. Most of the studies narrow down to tangible resources and threshold competencies and how they affect commercial airlines in Kenya. Also, from the existing literature, most of the studies have focused on the national airline, Kenya Airways. Therefore, the literature is thin on strategic capabilities and how they exert influence on the performance of the entire commercial airline industry.

Hence, this research aimed to fill the gap by investigating the effect of strategic capabilities and how they influence the social, economic and environmental performance of commercial airlines operating in the Kenya. Addressing these areas of exploration could contribute to bridging the research gap between strategic capabilities and domestic airline performance. By deepening the understanding of these relationships, the study aimed to provide valuable insights to the industry and help airlines make informed strategic decisions.

2.5 Conceptual Framework

The conceptual framework represents a methodical presentation that identifies factors that, when combined, explain the problem(s) at hand. Consequently, a conceptual framework is a collection of overarching principles that serve to explain how independent and dependent variables relate to one another. Hence, a conceptual framework entails a set of broad ideas which explains the relation between explanatory and dependent variables.

Figure 2.1: Conceptual Framework



Source: Researcher (2024)

2.5.1. Conceptual Review

Strategic capabilities refer to an organizations' collective resources, skills, and competencies that enable it to achieve its long-term objectives and attain a competitive edge in the marketplace. These capabilities encompass several factors, such as the organization's human capital, technological infrastructure, financial resources, brand reputation, intellectual property, and strategic partnerships (Huikkola, Kohtamäki, and Ylimäki, 2022). Strategic capabilities enable a firm to create value and adopt defensive and offensive positions in industry to yield high-level returns on investment and enhance market share in the economic, social, and environmental spheres of influence

Resource-based view theory and dynamic capability theory focuses on the strategic capabilities such as strategic internal resources and capabilities that organizations can utilize to attain sustainable competitive advantages over rivals in the market. The RBV theory suggests that a company's unique resources and capabilities can be leveraged to create a competitive advantage. According to the dynamic capability theory, firms must constantly improve and grow their capability to adapt to unpredictable environments. These capabilities encompass tangible resources, such as technology, physical assets, and intangible assets, such as knowledge and skills to maximize their utility and sustainable performance.

Resource-based view theory focuses on the strategic internal resources and capabilities firms can utilize to attain sustainable competitive advantages over rivals in the market. The Resource-based view theory suggests that a company's unique resources and capabilities can be leveraged to create a competitive advantage. This theory also emphasizes how management is key in maximizing resources and capabilities to acquire a competitive edge. The capacity to expand, enhance, or rearrange one's capabilities through time makes them dynamic. This strategy involves identifying and developing the firm's unique resources and capabilities with intangible assets such as intellectual property, brand reputation, and distribution networks to create a sustainable competitive advantage.

Sustainable performance is the ability of an entity to operate in such a way that it ensures long-term success whilst maintaining economic viability, social responsibility, and

environmental stewardship. It entails balancing the financial performance of an organization with contributions to the well-being of the environment and society at large (Heim, Vigneau, and Kalyuzhnova, 2023). Utilizing a combination of economic, social, and environmental metrics, one can assess the performance of an organization. This approach, often considered triple-bottom-line, evaluates a company's success regarding its influence on society, the environment, and its financial performance (Heim, Vigneau, and Kalyuzhnova, 2023). Economic metrics are utilized to assess a company such as an airlines' profitability and financial performance. These metrics give insight into a firm's capacity to generate revenue, control expenses, and maximize shareholder value (Santos, Lisboa, Crespo, Moreira, and Eugenio, 2022).

Additionally, the role of governance and leadership can also impact sustainable performance. Firms having robust corporate governance often report higher returns on assets and equity. Effective governance and leadership can ascertain that a company's goals align with shareholder and stakeholder interests, thereby promoting a long-term perspective and fostering a culture of innovation and accountability. The effect of a company such as an airline on society and its stakeholders is measured by social metrics (Scarpellini, 2022). These metrics assess a company's efforts in relation to aspects such as employee satisfaction and well-being, customer satisfaction, and community engagement. Environmental metrics assess a company's sustainability efforts and environmental impact (Peiró-Signes, Cervelló-Royo, and Segarra-Oa, 2022). Airline's efforts to lessen its carbon footprint, save resources, and embrace environmentally friendly practices are gauged by these criteria. The study examined strategic capabilities, namely tangible and intangible resources, core and threshold competencies and how they affect the economic, social and environmental performance of domestic commercial airlines in line with sustainable performance.

2.6 Study Variables

2.6.1 Dependent variable

The study's dependent variable was performance of Kenya's domestic commercial airlines. It was measured by economic, social and environmental performance. Economic performance was estimated profit, revenue and sales. Profit was estimated by gross profit margin, operational and Return on Assets (ROA). Revenue was estimated by operating

revenue growth, Cost per Available Seat Kilometer (CASK) and airline’s yield while sales will be estimated by sales performance, customer base and marketing efforts. Social metric was estimated by Corporate Social Responsibility (CSR), diversity and inclusion, employee well-being and passenger well-being. The environmental metrics were estimated by waste management initiatives, carbon offsetting and reduction programs and fuel efficiency measures. The economic, social and environmental performance were estimated using 5-point Likert scale with Strongly disagree (1), Disagree (2), Uncertain (3), Agree (4) and lastly strongly agree (5). The analysis of dependent variables was done using correlation, descriptive statistics, and also logistic regression.

2.6.2 Independent variables

Independent variables in the study were intangible and tangible resources, core and threshold competencies. Tangible resources were estimated by cash from operations, physical structures, buildings and financial investments. Intangible resources were estimated by brand reputation, organizational culture, organizational structure and intellectual property rights. Threshold competencies were estimated by safety and security, regulatory compliance, customer service and fleet management. Core competencies were estimated by excellent service, strong partnerships and alliances, talent development, cutting-edge technology adoption and market niche offering unique products and services. The independent variables were estimated using a 5-point Likert scale. The analysis of the independent variables was done using descriptive statistics, correlation, and regression.

2.7 Operationalization of Study Variables

Table 1:Operationalization of Variables

	Variable	Attributes	Measurement	Analysis
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Dependent Variables	Economic Performance of commercial airlines	Profit.	5-point Likert	Correlation Descriptive Regression
		i. Gross profit margin		
		ii. Operational cost		
		iii. Return on Assets (ROA)		
Revenue	Economic Performance of commercial airlines	i. Operating Revenue growth	5-point Likert	Correlation Descriptive Regression
		ii. Cost per Available-Seat Kilometre (CASK)		
		ii. The airline's yield		
Sales	Economic Performance of commercial airlines	i. Sales performance	5-point Likert	Correlation Descriptive Regression
		ii. Customer base		
		iii. Marketing efforts		
Dependent Variable	Socio Performance of commercial airlines	i. Corporate Social Responsibility (CSR)	5-point Likert	Correlation Descriptive Regression
		ii. Diversity and Inclusion		
		iii. Employee Well-being		
		iv. Passenger Well-being		
Dependent Variable	Environmental Performance	i. Waste Management	5-point Likert	Descriptive Correlation Regression
		ii. Carbon Offsetting and Reduction Programs		
		iii. Fuel Efficiency Measures		

Independent variable	Tangible resources	<ul style="list-style-type: none"> i. Cash from operations ii. Physical structures. iii. Buildings iv. Financial investments 	5-point Likert	Descriptive Correlation Regression
Independent variable	Intangible resources	<ul style="list-style-type: none"> i. Brand reputation ii. Organizational culture iii. Organizational structure iv. Intellectual property rights 	5-point Likert	Descriptive Correlation Regression
Independent variable	Threshold competencies	<ul style="list-style-type: none"> i. Safety and Security ii. Regulatory Compliance iii. Customer Service iv. Fleet Management 	5-point Likert	Descriptive Correlation Regression
Independent variable	Core competencies	<ul style="list-style-type: none"> i. Excellent service. ii. Strong partnerships and Alliances. iii. Talent development iv. Cutting-edge technology adoption. v. Market niche 	5-point Likert	Descriptive Correlation Regression

2.8 Chapter Summary

The chapter presented a literature review starting with the main theories' theoretical review that explains the relationship between strategic capabilities adopted by firms and how they affect the firm's performance. Dynamic capability theory, coupled with resource-based review theory, intellectual capital theory, and strategic balancing theories were discussed. The chapter then looked at the existing empirical literature by presenting

a scholarly discussion on intangible and tangible resources, core and threshold competencies and how they affect commercial a firm's social, economic, and environmental performance. The chapter then looked at the research gaps in the commercial airline industry in Kenya.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research methods utilized in the study are covered in this section. It discusses the characteristics, target population, study location, data collection, analysis, and data ethics.

3.2 Research Philosophy

A research philosophy entails a belief on how a particular phenomenon's data should be gathered, analyzed, interpreted and utilized (Tamminen and Poucher, 2020). Research philosophy reflects the critical assumptions which serve as basis for the research approach. The option of a specific research philosophy is impacted by practical implications on purpose, design, and methodology of the research (Cash et. al., 2022). Epistemology (what is known to be true) as opposed to doxology (what we believed is true) encompasses several philosophies of research approach. Therefore, purpose of science, then, is to transform things believed into things known (Tiwari, 2018). Two significant research philosophies have been identified-positivist (scientific) and interpretivist, also referred to as antipositivist (Adakawa and Garba, 2020; Dewi, 2021). Positivist philosophy claims that social world can be objectively understood, with a scientist as an objective analyst and who dissociates from personal values while working independently. That often entails the manipulation of the reality, with variations occurring in a single independent variable so as to identify the regularities in the form relations between some of the social world's constituent elements. With this research philosophy, predictions can be made solely based on previously explained and observed realities and their relations (Gjorgjioska and Tomicic, 2019; McBride, Misnikov and Draheim, 2022).

Interpretivists argue that only via subjective interpretation coupled with reality intervention can that reality be wholistically comprehended. Interpretivists contend that study of phenomena in its natural environment is critical, together with the acknowledging that scientists cannot avoid affecting the phenomena they study (Adakawa and Garba, 2020; Gjorgjioska and Tomicic, 2019). This research philosophy states may be several

interpretations of the reality, but maintains that these interpretations are part of the scientific knowledge. The positivist and interpretivists research philosophies are regarded as complementary; hence providing holistic research strategies and methods that allows researchers to fully explore the particular phenomenon under study from different perspectives (McBride et.al., 2022). Positivism is rooted in the belief that there is an objective reality that can be studied and understood through systematic observation and measurement by employing qualitative methods. It aims to establish causal relationships between variables. This approach is suited for hypothesis testing and generalizing findings to larger populations. It strives for objectivity, minimizing personal bias, therefore enhancing the reliability and validity of the findings (Dewi, 2022). Interpretivism acknowledges that reality is socially constructed and shaped by human experiences and perspectives. It seeks to explore and understand the underlying meaning and context of human actions by employing qualitative methods such as interview, observation, and content analysis to gather rich, descriptive data (McBride et.al., 2022). By combining both research philosophies, we can create a more well-rounded research approach. Quantitative data in the demographics can provide measurable indicators of performance and trends, while qualitative data from strategic capabilities can add depth and context by exploring the human factors that shape airline performance. This integrated approach allows researchers to develop a comprehensive understanding of how operational efficiency, customer experiences, and social dynamics collectively influence airline performance. Therefore, this study used both positivist and interpretivists philosophies to gain a holistic understanding of the relation between strategic capabilities and the performance of Kenya's domestic commercial airlines.

3.3 Research Design

Research design is contingent on the study's motivation, research problem, available resources, and ethical guidelines (Saunders, Lewis and Thornhill, 2014). It outlines the steps, relevant procedures and conditions that were followed to collect and analyse data to address the study objectives (Upagade and Shende, 2012). This study utilized a

correlational design research design. The design is excellent in identifying and understanding the relation between multiple variables. Additionally, it can reveal how strongly these variables are related. This research design outlines the methodology, objectives, data collection, analysis, ethical considerations and structure for carrying out a correlation study on effects of strategic capabilities on sustainable performance for commercial domestic airlines in Kenya

Bloomberg, Cooper, and Schindler (2014) stated that this research design was appropriate when we want to determine how, what, and where the situation or problem came about without interfering with the study subjects or their environment. Additionally, it is applicable to quantitative data-gathering techniques, enabling the acquisition of a range of data (De Franco, Kothari and Verdi, 2011). The design was selected because it is exact, accurate, and incorporates carefully organized descriptions of occurrences. It accurately captures a population's traits (Aggarwal and Ranganathan, 2019; Dixit et al., 2020; O'Callaghan, Lam and Moss, 2020). This research design was used to determine how strategic capabilities (intangible resources, tangible resources, threshold competencies and core competencies) (independent variables) influence the commercial airlines' performance in Kenya (dependent variable). The study's population was domestic commercial airlines in Kenya. Descriptive, coupled with inferential statistics were utilized to draw conclusions on the characteristics of the population (Anderson, 2017; Raines, 2013; Salkind, 2014).

3.4 Target Population

A complete count of items under examination is the target population (Blumberg et al., 2014). In the study, a total of 14 commercial airlines operating in Kenya's domestic market (KCAA, 2022). The population of the study was 120, which includes top and middle-level managers in all the 14 commercial airlines working in customer service, marketing, operations, finance, and aircraft maintenance departments. The study distributed 120 questionnaires across the airlines based on the size of their personnel and got response from 103 respondents.

Table 2.1: Senior and Mid-level Respondents issued with a Questionnaire

		Respondents Targeted	Respondents Interviewed
1	Customer service	20	16
2	Marketing	23	22
3	Operations	25	19
4	Finance	34	29
5	aircraft maintenance	19	17
	Total	120	103

Source: Kenyan Airlines Reports

3.5 Inclusion and Exclusion Criteria

The study included respondents from domestic commercial airlines in Kenya that consented to take part in this study. The study excluded all respondents from commercial airlines in Kenya that did not consent to take part in the study.

3.6 Data Collection Methods

The study's nature defines the data collection method, such as the use of questionnaires, focus group discussions and interviews (Busetto, Wick and Gumbinger, 2020; Moser and Korstjens, 2018). The study gathered primary data using a physical questionnaire distributed to commercial airlines workers in customer service, marketing, operations, finance, and aircraft maintenance departments. The questionnaire (Appendix II) had six sections. Section A looked at the demographics. Section B had questions on tangible resources. Section C has questions regarding intangible resources while section D entail questions regarding threshold competencies. Section E has questions on core competencies with section F having questions the performance of commercial airlines in Kenya. Section F entails open ended questions. The researcher submitted requests for research permit for primary data collection from NACOSTI's. The researcher also sought for ethical clearance from Strathmore University Ethics Review Committee. Respondents consent was sought before allowing them to take part in the study. The student was guided by Strathmore University's Institutional Ethics Review Committee (SU-IERC) and NACOSTI in adhering to informed-consent procedures and safeguarding the respondents' confidentiality and privacy. The decision to participate in the study was be entirely up to the participants. All references were appropriately credited and acknowledged.

3.7 Research Quality

According to Saunders, Thornhill, and Lewis (2014), piloting is done to assess the suitability of research instruments and spot biases and measurement mistakes so that research questions may be answered correctly. Commercial airlines in Kenya served as the testing ground for the research tool. The efficacy, efficiency, and relevance of research techniques in fulfilling the study goals and guaranteeing the study satisfies the quality criteria necessary at this level was assessed by analyzing pilot data. According to Clayson et al., (2019) and Kang (2021), pilot research needs at least 10 respondents selected from the population. In this research, a pilot test was conducted using 14 randomly selected questionnaires at Kenya Airways and 748 Air Services to assist in highlighting the surveys' inconsistencies and ambiguities that need to be fixed.

3.8 Reliability of Research Instrument

When used on various populations, a research tool must be reliable to assess the outcomes predicted (Saunders et al., 2014). Although there are other ways to measure dependability, Cronbach's Alpha is the most often used metric in the social sciences. Cronbach's Alpha was utilized in the research to evaluate reliability of the findings. If the coefficient, which runs from 0 to 1, is more than 0.7, the instrument is considered to be dependable (Cronbach, 1951; Sekaran and Bougie, 2016).

3.9 Validity of Research Instruments

The degree to which a research tool measures what it is intended to assess is known as validity (Onen, 2016). The likelihood that the research instrument accurately captures the content of the universe was assessed and generalized in the content validity examination. This study used the entire population of the top and mid-management in the commercial domestic airlines in Kenya to achieve validity. To assess the tool's content, a pilot study was used to administer the pre-test for questionnaires. For the results to attain external validity, where they can be used to generalize the characteristics of the entire population,

and internal validity, whereby questions raised answer the outcomes of the study objectives Cronbach's Alpha test was carried out.

3.10 Data Analysis

Data analysis entails reviewing and summarising data to obtain valuable information and draw conclusions. Additionally, Kombo and Tromp (2014) define data analysis as the process of reviewing survey data and drawing conclusions from it. The study used descriptive and inferential statistics in the analysis. Data analysis was carried out using the IBM SPSS and Excel. Before analysis, data was cleaned to ascertain quality. Descriptive statistics were utilized to describe the demographics of the study participants, their age, gender, department, years in the management role at the airlines, years employed by the airline, years the commercial airline has been operating in Kenya, the number of planes the commercial airlines operate, type of planes airline uses and the number of offices that the commercial airlines operate in Kenya.

Inferential statistics were utilized to predict how strategic capabilities (tangible resources, intangible resources, threshold competencies and core competencies) influence economic, social, and environmental performance of commercial airlines in Kenya. Before carrying out ordinal regression, pre-estimation tests were done to establish the model that best fits the data. These include test for normality of the variables, multicollinearity test and correlation to examine the nature and magnitude of the relationship between the variables under study. Then study chose ordinal regression analysis. This is an extension of the simple linear regression and was utilized to predict the value of ordinal level dependent variable based on the ordinal level independent variables as they were not normally distributed. Ordinal regression also allows the study to determine the model's overall fit and the relative contribution of the independent variables to the total variance. Ordinal regression analysis generates estimates known as coefficients. Using this regression, the study calculated the magnitude of variance on the dependent variable that was accounted for by the variation in each independent variable's coefficients. This calculation showcases the relative significance of each independent variable to the relationship. Commercial airlines' performance is the dependent variable, while tangible resources,

intangible resources, threshold competencies and core competencies are the independent variables. The empirical model is as follows:

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots\dots\dots (3.1)$$

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots\dots\dots (3.2)$$

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots\dots\dots (3.3)$$

Where:

Y_1 = Economic performance

Y_2 =Social performance

Y_3 =Environmental performance

β_0 = Constant Term;

$\beta_1, \beta_2, \beta_3, \beta_4$ represents the beta coefficients;

X_1 = Tangible resources, X_2 = Intangible resources, X_3 = Threshold competencies, X_4 = Core competencies

ε = Error term

3.11 Ethical Issues in Research

The researcher submitted applications for research permission from NACOSTI and ethical clearance from Strathmore University Ethics Review Committee (SU-IERC). To collect data, Permission was sort from the Nairobi County local authority. Approval was asked from commercial airlines to engage in the study. Verbal and written consent from the respondents was asked before involving them in the study, and participation was optional. The participants assented to the informed consent letter in the questionnaire for purposes of confidentiality and anonymity of the respondents. That allowed the information provided to be used mainly for research purposes and not to conceal their identification or recognition of the subjects at any point. The SU-IERC and NACOSTI served as the researcher’s guides in observing informed-consent guidelines and protecting the privacy and confidentiality of the respondents. The study’s participation was totally up to them. All sources were properly acknowledged and cited. All the data collected remained confidential.

CHAPTER FOUR

FINDINGS

4.1 Introduction

The findings were interpreted and discussed in this part. Response rates were first shown, then descriptive statistics that emphasized the key elements of the study variables. The empirical findings and diagnostic testing came next.

4.2 Response Rate

Out of the 120 online surveys distributed, only 103 were completed, meaning that 85.83% of the responses were received. The response was considered appropriate. Sekaran and Bougie (2016) state that in social research, a response rate above 60% is considered reliable.

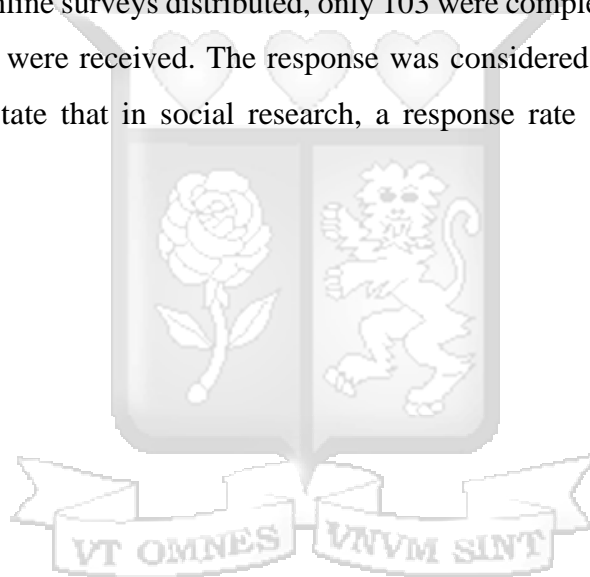
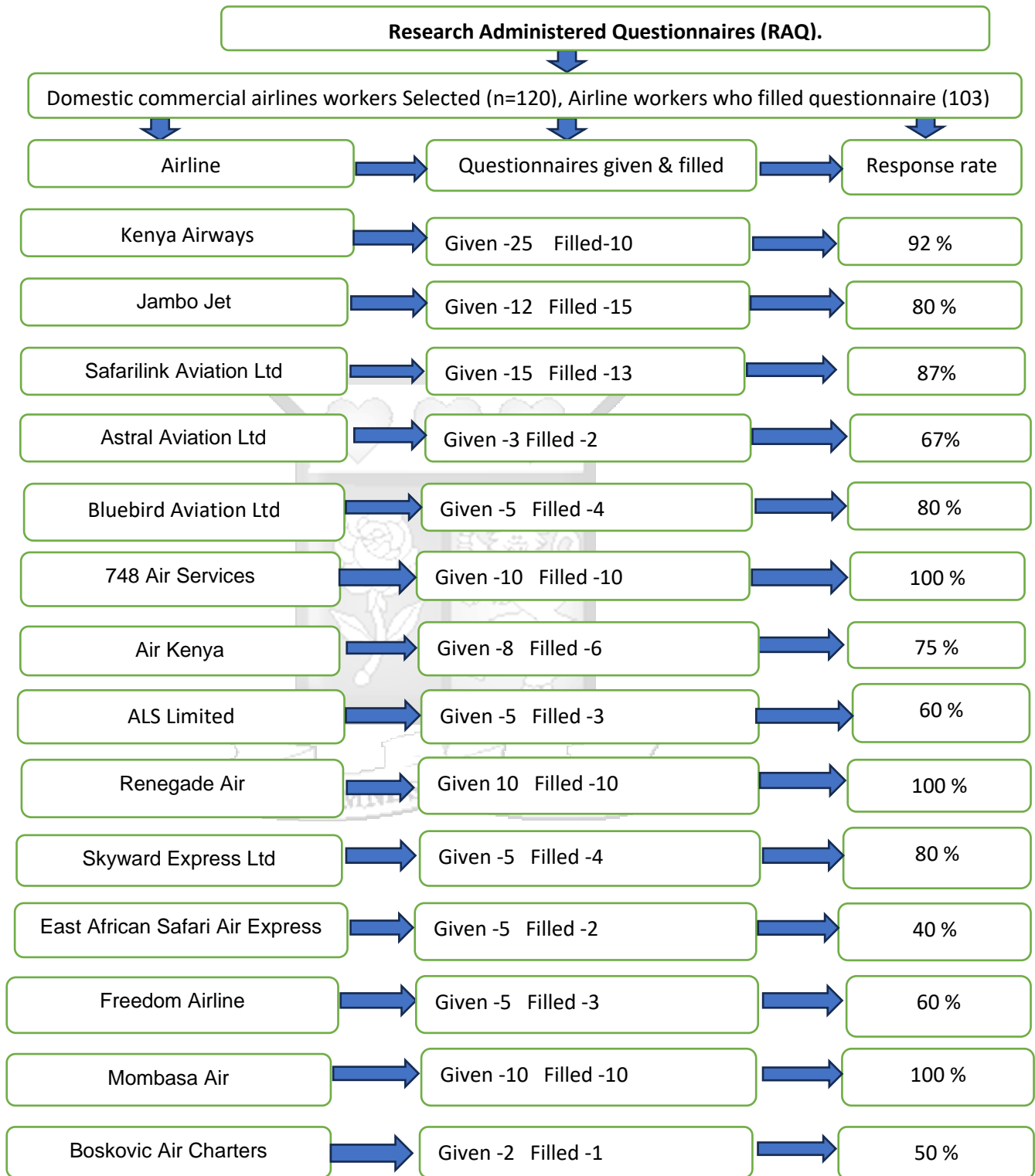


Figure 4.1: Researcher Administered Questionnaire Response Rate (RAQ)



4.3 Reliability Analysis

The study used Lee Cronbach's (1951) Cronbach's Alpha coefficient for reliability analysis. This assessment looks at the internal consistency or reliability of multiple-choice Likert scale questions. If multiple Likert scale questions accurately estimate the study variables, then they can be considered reliable. The variables' internal consistency under investigation is higher the closer the coefficients are to 1.0. The Cronbach alpha (α) = 0 indicates that all the variables are completely independent of one another, meaning they do not share any covariance or correlation. When the number of variables approaches infinity, the value of α approaches 1 if all the variables have strong covariances or correlations.

More variables share a covariance and estimate the same underlying notion when the α coefficient is higher. Goforth (2015) stated that a minimum α coefficient of 0.65 or higher is deemed reliable and recommended for internal consistency using Cronbach's Alpha test. Reliability coefficient of the study variables is 0.947 and positive, as shown by the results captured in Table 4.1. This implies that domestic commercial airlines' strategic capabilities and economic, social and environmental performance have positive covariance and have achieved internal consistency (reliability), as the coefficient was positive and above 0.684.

Table 3.1: Cronbach Alpha Reliability Analysis

Reliability Statistic		
Cronbach Alpha	The Cronbach's Alpha Based on the Standardized Items	No. of Items
0.947	0.947	7

4.4 Demographic characteristics of RAQ Respondents

The study sought respondents' background information, which entails the domestic commercial airline that they work for, gender, department in the airlines they work in, their highest education level, how long the airline has been operational, number of people employed by the airline, number of planes the airline operates, type of planes the airline use, and the number of offices the airline has. Frequency and percentages were used for data analysis.

4.4.1 Respondents Employed by the Domestic Commercial Airlines

Table 4.2 indicates number of respondents employed by the respective domestic commercial airlines in the study. Most of the respondents (23) were from Kenya Airways, comprising (22.30%); Safarilink Airline Ltd (13), comprising (12.6%), came in second; Jambo Jet (12), comprising (11.7%) came in third. The rest are as shown below in Table 4.2.

Table 4.2: Number of Respondents by Domestic Commercial Airlines

Airline	Frequency	Percent
Kenya Airways	23	22.30
Mombasa Air	10	9.70
Renegade Air	10	9.70
748 Air Services	10	9.70
Air Kenya	6	5.8
ALS Limited	3	2.9
Astral Airline Ltd	2	1.90
Bluebird Airline Ltd	4	3.90
East African Safari Air Express Ltd	2	1.90
Freedom Airline	3	2.9
Jambo Jet	12	11.7
Boskovic Air Charters	1	1.9
Safarilink Airline Ltd	13	12.60
Skyward Express Ltd	4	3.9
	103	

4.4.2 Gender of the respondents

Gender representation, as shown in Table 4.3, indicates that 62 respondents (64.2%) were male while 41 (39.8%) were females.

Table 4.3: Respondent's Gender

Gender	Frequency	Percent
Male	62	60.20
Female	41	39.80
Total	103	100

4.4.3 Department in the Airlines the Respondents work in

Table 4.4 indicates the airline department that the respondents work in. From the results, the majority, 29, worked in operations (28.2%), with 22 in customer service (21.4%) and 17 in finance (16.5%), as shown below.

Table 4.4: Departments Respondents Work in

Department	Frequency	Percent
Marketing	16	15.50
Customer service	22	21.40
Aircraft maintenance	4	3.90
Other	15	14.60
Operations	29	28.20
Finance	17	16.50
Total	103	100.00

4.4.4 Highest Education Level

Table 4.5 indicates the highest level of education that was attained by respondents working for domestic commercial airlines. From the results, 63 had a university degree (61.2%), 27 of them had a diploma (26.2%), 10 of them had a postgraduate degree (9.7%). Only 2 respondents (1.9%) each had a certificate (1.9%) and other qualifications (1.9%).

Table 4.5: Education Level

Education Level	Frequency	Percent
Certificate	2	1.9
Diploma	27	26.2
Graduate	63	61.2
Post graduate	10	9.7
Other	2	1.9
Total	163	100

4.4.5 Period the Airline Been Operational

The study examined the airlines' operational period, as shown in Table 4.6. The results showcase that 48 domestic commercial airlines (46.6%) have been operational for over

200 years, 27 have been operational between 1-5 years (26.2%), with 16 had been operational for 6-10 years (15.5%).

Table 4.6: Airline Operational Period

Airline Operational Period	Frequency	Percent
Below 1 year	3	2.9
1-5 years	27	26.2
6-10 years	16	15.5
11-15 years	2	1.9
16-20 years	7	6.8
Over 20 years	48	46.6
Total	103	100

4.4.6 Number of People Employed by the Airlines

The study examined the number of people employed by the domestic commercial airlines. The results showcase that most airlines had more than 350 employees within their ranks. Specifically, 34 airlines had over 350 employees (33%), 20 airlines had between 51-100 employees (19.4%), and 13 airlines had between 201-250 employees (12.6%). The rest are shown below in Table 4.7.

Table 4.7: Number of Staff Employed by the Airlines

Staff Numbers	Frequency	Percent
Below 50	4	3.88
51-100	20	19.40
101-150	12	11.70
151-200	8	7.80
201-250	13	12.60
251-300	11	10.70
301-350	1	0.97
Over 350	34	33.00
Total	103	100

4.4.7 Number of Planes the Airlines Operate

The results showcase that 32 airlines had between 11-15 planes (31.1%), 29 airlines operated over 25 planes (28.2%), with 28 airlines operated between 6-10 planes (27.2%). The rest are shown in Table 4.8 below.

Table 4.8: Number of Planes the Airlines Operate

Number of planes	Frequency	Percent
Below 5	2	1.90
6-10	28	27.20
11-15	32	31.10
16-20	10	9.70
21-25	2	1.90
Over 25	29	28.20
Total	103	100

4.4.8 Type of Planes the Airlines Operate

The results showcase that Wide-body airliners was the most popular type of plane operated by 29 domestic airlines (28.2%). The second most popular choice was narrow-body aircraft operating in 21 commercial domestic airlines (20.4%). Mid-sized jets were operational in 20 domestic airlines (19.4%), as shown in Table 4.9 below.

Table 4.9: Type of Plane the Airlines Use

Type of Plane	Frequency	Percent
Wide-body airliners	29	28.2
Narrow-body aircraft	21	20.4
Mid-sized jets	20	19.4
Heavy jets	3	2.9
Turboprop aircraft	13	12.6
Light-jets	4	3.9
Others	13	12.6
Total	103	100

4.4.9 Number of Offices the Airlines Have

The results showcase that majority of the airlines had less than 7 offices. Majority of the airlines, 39, had between 2-4 offices, followed by 21 airlines who had between 5-7 offices (20.4%). Only one commercial domestic airline (Kenya Airways) had over 15 offices, as shown in Table 4.10 below.

Table 4.10: Number of Airlines Offices

Number of Offices	Frequency	Percent
1	9	8.7
2-4	39	37.9
5-7	21	20.4
8-10	11	10.7
11-15	5	4.9
Over 15	1	0.9
Total	103	100

4.5 Descriptive Statistics

The study adopted descriptive statistics to investigate the impact of tangible resources, intangible resources, threshold competencies and core competencies on the economic, social, and environmental performance of domestic commercial airlines in Kenya using Likert scale questions. The descriptive measures included mean, mode, and standard deviation. According to Wu & Leung (2017), the five-point Likert scale is considered an interval scale. In this study, scores from 1 to 1.80 implies strongly disagree. Scores from 1.81 to 2.60 mean disagree. Scores from 2.61 to 3.49 means uncertain; scores from 3.50 to 4.20 means agree while scores from 4.21 to 5 means strongly agree.

4.5.1 Tangible Resources and Performance of Domestic Commercial Airlines

Amongst the tangible resources, the study found out that most of the respondents Agreed (A) that the cash earned from the airline's operations, the physical structures, and the airline's financial investments affected the performance of the domestic commercial airlines as the mean for the tangible resources was between 3.77 and 3.97 and the mode was 4 as shown below in Table 4.11

Table 4.11: Tangible Resources and Performance of Domestic

		The cash earned from the airline's operations [11]"	machinery, electronics, tools, and equipment [12]	Buildings (offices, warehouse, garage and repair shops, stores, parking space) [13]	financial instruments, shares, equity positions) [14]
N	Valid	103	103	103	103
Mean		3.83	3.97	3.82	3.77
Mode		4	4	4	4
Std. Deviation		.864	.868	.883	.866
Minimum		1	1	1	1
Maximum		5	5	5	5

Note: Strongly Disagree (SD)=1

Disagree (D)=2

Uncertain (U)=3

Agree (A)=4

Strongly Agree (SA)=5.



4.5.2 Intangible Resources and Performance of Domestic Commercial Airlines

Amongst the intangible resources, most of the respondents Agreed (A) that distinct brand reputation, organizational culture, legally protected copyrights, software, trademarks, designs, website, and patents, the shared values, beliefs, attitudes and behaviour of employees and managers, operating and reporting structure affected the performance of the domestic commercial airlines as the mean for the tangible resources was between 3.76 and 3.94 and mode was 4 as shown below (Table 4.12).

Table 4.12: Intangible Resources and Performance of Domestic

		a distinct brand reputation [15]	organizational culture [16]	copyrights, software, trademarks, designs, website [17]	The shared values, beliefs, attitudes and behaviour of employees and managers [18]	The operating and reporting structure [19]	Legally protected patents [20]
N	Valid	103	103	103	103	103	103
Mean		3.85	3.76	3.83	3.94	3.89	3.83
Mode		4	4	4	4	4	4
Std. Deviation		1.033	1.005	.930	.906	.917	.994
Minimum		1	1	1	1	1	1
Maximum		5	5	5	5	5	5

4.5.3 Threshold Competencies and Performance of Domestic Commercial Airlines

Amongst the threshold competencies, the study found out that the majority of respondents Agreed (A) that safety and security of passengers, crew, and aircraft, competent staff who deliver end-to-end high-quality service, effective maintenance and repair processes of the fleet, adherence to regulatory compliance, robust financial management capabilities, and control over the production, operational and overhead expenses had an impact the domestic commercial airlines performance

as the mean for the tangible resources was between 3.7 and 4.05 and mode was 4 as indicated below in Table 4.13 below.

Table 4.13: Threshold Competencies and Performance of Domestic

	safety and security of passengers, crew, and aircraft [21]	competent staff [22]	Fleet management and maintenance . [23]	adherence to regulatory compliance [24]	Financial management [25]	costs control along the existing activity cost chain [26]
N Valid	103	103	103	103	103	103
Mean	4.05	4.05	3.90	4.07	3.70	3.73
Mode	4	4	4	4	4	4
Std. Deviation	.933	.821	.965	.889	1.065	1.002
Minimum	1	1	1	1	1	1
Maximum	5	5	5	5	5	5

4.5.4 Core Competencies and Performance of Domestic Commercial Airlines

Amongst the core competencies, the study confirmed that most of the respondents Agreed (A) that benchmarks against competitors, market niche for passengers, unique low-priced products, chartered flights, being a low-cost carrier, and collaboration between airlines had an impact on performance of the domestic commercial airlines as the mean for the tangible resources was between 3.52 and 3.78 and mode was 4. However, regarding customers' sensitivity to price changes, the respondents were uncertain about whether they affect the performance of domestic commercial airlines, as shown in below (Table 4.14).

Table 4.14: Core Competencies and Performance of Domestic Airlines

	benchmarks its product and services [27]	market niche [28]	unique low-priced products and services [29]	unique products for varied customer groups [30]	unique technology [31]	chartered flights with low carbon emissions [32]	a low-cost carrier [33]	customers are less sensitive to change in prices [34]	collaborations and networks. [35]
N Valid	103	103	103	103	103	103	103	103	103
Mean	3.63	3.77	3.75	3.76	3.69	3.62	3.52	3.00	3.78
Mode	4	4	4	4	4	4	4	4	4
Std. Deviation	1.019	.972	.926	.913	.897	.898	1.074	1.163	.928
Minimum	1	1	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5	5	5

4.6 Performance of the airlines

4.6.1 Economic Performance of Airlines

On economic performance, the majority Agreed (A) that airlines has talent development and employee engagement initiatives to attract and retain top talent, cost advantage is attained through a restructuring, growth in gross profits, range of routes and destinations it offers, Return on Assets (ROA) performance, effectively management of operational costs, competitive ticket prices, Passenger Revenue per Available Seat Mile, revenue generated per passenger or per kilometre flown, airline's marketing efforts and airline's sales performance had an impact on performance of domestic commercial airlines as the mean for the tangible resources was between 3.5 and 3.85 and mode was 4. However, in regards to growth in its gross profit margin most respondents were uncertain as shown below in Table 4.15 below

Table 4.15: Economic Performance of Domestic Airlines

	talent develo pment [36]	cost advant age [37]	growth in its gross profit margin [38]	profita bility [39]	Return on Assets (ROA) [40]	operati onal costs [41]	The airline’s revenue growth [42]	PRAS M [43]	aver ages reve nue gene rate d. [44]	sales in ticket s and cargo hauls [45]	marketin g efforts [46]	sales performan ce. [47]
N	103	103	103	103	103	103	103	103	103	103	103	103
Valid												
Mean	3.80	3.71	3.42	3.60	3.50	3.57	3.51	3.66	3.50	3.77	3.85	3.81
Mode	4	4	4	4	4	4	4	4	4	4	4	4
Std. Deviation	.933	.859	1.080	1.042	.938	1.053	.989	.986	.906	.877	.868	.940
Minimum	1	1	1	1	1	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5	5	5	5	5	5

4.6.2 Social Performance of Airlines

In regards to social performance, the majority Agreed (A) that sales performance impacts its overall perception of its brand, ability to expand its customer base, communicates the value of its services through its sales efforts and that airline has CSR initiatives focused on supporting social causes. They also agreed that the airline has made initiatives to promote diversity, inclusivity and representation amongst its workforce and leadership in addition to promoting fair treatment and equal opportunities for all employees as the mean which was between 3.74 and 3.92 as shown in Table 4.16 below.

Table 4.16: Social Performance of Domestic Airlines

	perception of its brand. [48]	customer base [49]	sales efforts [50]	CSR initiatives [51]	diversity, inclusivity and representation [52]
N Valid	103	103	103	103	103
Mean	3.92	3.71	3.80	3.74	3.75
Mode	4	4	4	4	4
Std. Deviation	.813	.976	.784	.970	.904
Minimum	1	1	1	1	1
Maximum	5	5	5	5	5

4.6.3 Environmental Performance of Airlines

In regards to environmental performance, the study established that majority of the respondents Agreed (A) that their airline prioritizes passenger safety and well-being by maintaining high safety standards, the airline enhance ease of access to passengers with disability to provide a comfortable travel experience, the airline has made initiatives to enhance the well-being of staff by supporting work-life balance, health and wellness programs and creating a conducive and supportive work environment, the airline regularly engages with stakeholders to understand their needs, address concerns, and incorporate their perspectives in decision-making processes. The respondents also agreed that the airline participates in carbon offsetting programmes to compensate for their carbon emissions and implements effective waste management practices to minimize waste generation and promote recycling and proper disposal of materials.

The airlines also explore or have made initiatives to invest in alternative fuels, such as sustainable airline fuels (SAFs) or biofuels, to lower carbon emissions, has made initiatives to reduce aircraft noise pollution within the airports and its immediate surroundings, has commitment to environmental performance by publishing annual sustainability reports, and adheres to the environmental regulations and standards imposed by the airline authorities as shown by mean which was between 3.50 and 4.00 as shown below (Table 4.17).

Table 4.17: Environmental Performance of Domestic Airlines

	passenger safety and well-being [53]	Staff well-being [54]	Community engagement [55]	Carbon offsetting programmes [56]	effective waste management practices [57]	invest in alternative fuels to lower carbon emissions. [58]	initiatives to reduce aircraft noise pollution [59]	annual sustainability reports [60]	adherence to the environmental regulations and standards [61]
N Valid	103	103	103	103	103	103	103	103	103
Mean	4.00	3.84	3.79	3.58	3.75	3.50	3.59	3.76	3.96
Mode	4	4	4	4	4	4	4	4	4
Std. Deviation	.939	.916	.871	.902	1.017	.989	.954	.834	.896
Minimum	1	1	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5	5	5

4.7 Pre-Estimation Diagnostic Tests for Ordinal Regression

The ordinal regression was utilized to examine the effect of strategic capabilities (tangible resources, intangible resources, threshold competencies, core competencies) on performance of commercial airlines since the data on variables was not normally distributed. Before the ordinal regression was done, diagnostic tests were done to check for normality and multicollinearity of the study variables.

4.6.1 Normality Test

The normality was tested through use of Kolmogorov-Smirnova (Lilliefors, 1967) test, Shapiro-Wilk (1965) tests and a histogram. The null hypothesis is that a set of data is normally distributed.

H₀: Tangible resources actors are normally distributed

H₀: Intangible resources factors are normally distributed

H₀: Threshold competencies factors are normally distributed

H₀: Core competencies are normally distributed

H₀: Economic factors are normally distributed

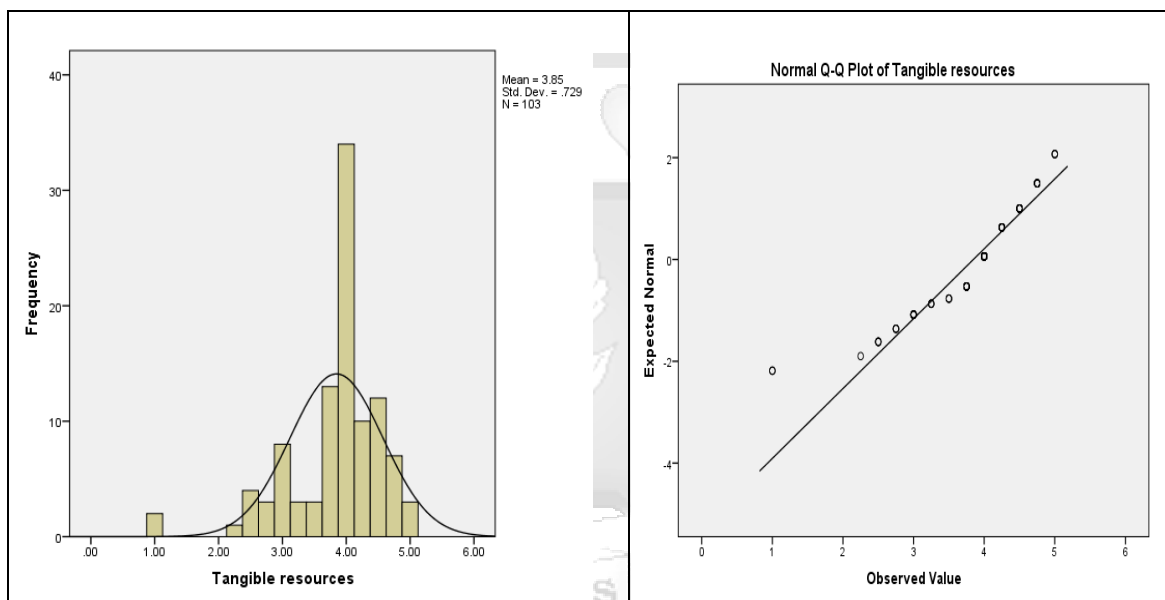
H₀: Social factors are normally distributed

H₀: Environmental factors are normally distributed

Tangible Resources

From the histogram, we can see that in the case for tangible resources, distribution appears to have thick tail with outliers on the middle of the distribution. This implies that the data has heavy tails hence high leptokurtic kurtosis. Core competencies had mean of 3.85 and standard deviation of 0.729 as shown in Figure 4.2 below.

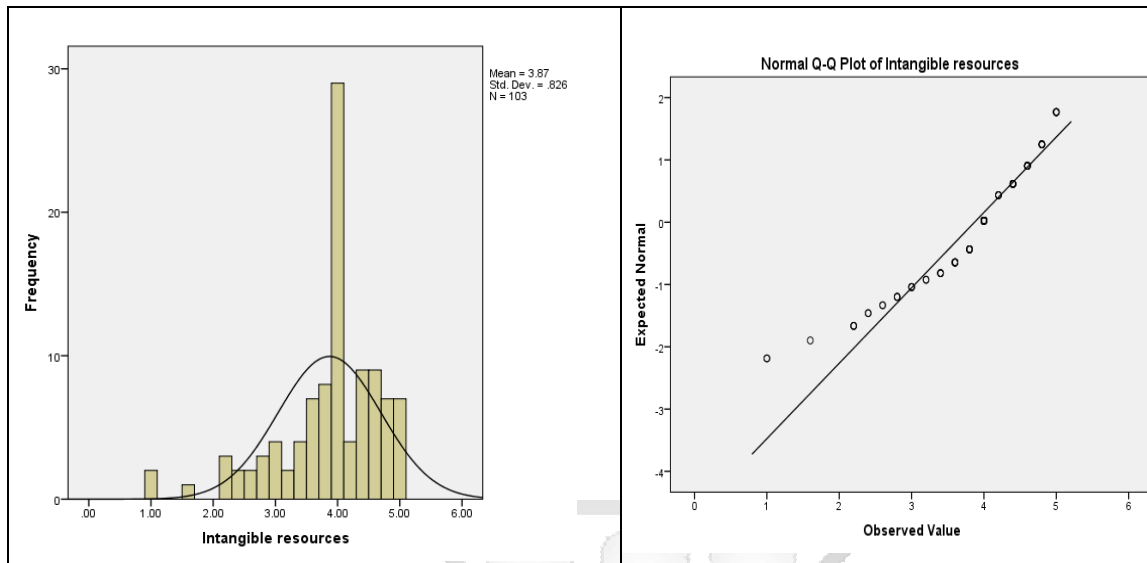
Figure 4.2: Tangible Resources Distribution



Intangible Resources

From the histogram, we can see that in the case for intangible resources, distribution appears to have thick tail with outliers on the middle of the distribution. This implies that the data has heavy tails hence high leptokurtic kurtosis. Core competencies had mean of 3.87 and standard deviation of 0.826 as shown in Figure 4.3 below.

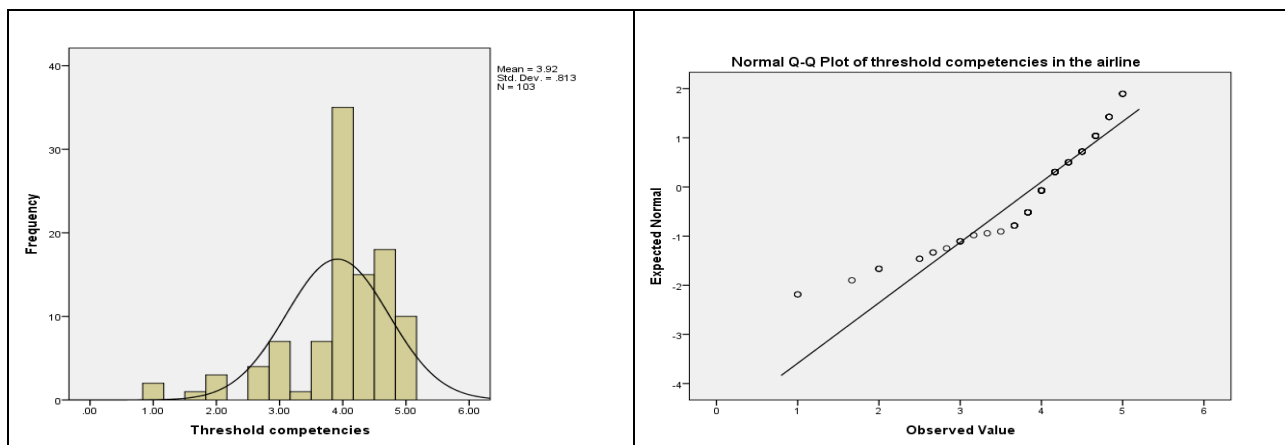
Figure 4.3: Intangible Resources Distribution



Threshold Competencies

In the ideal case for a normally distributed variable, the histogram should be symmetric around the mean of the distribution. From the histogram, we can see that in the case for threshold competencies, distribution appears to be slightly skewed to the left as it has a slightly longer left tail. This implies that the data has heavy tails hence high kurtosis. The data had mean of 3.82 and standard deviation of 0.813 as shown below (Figure 4.4).

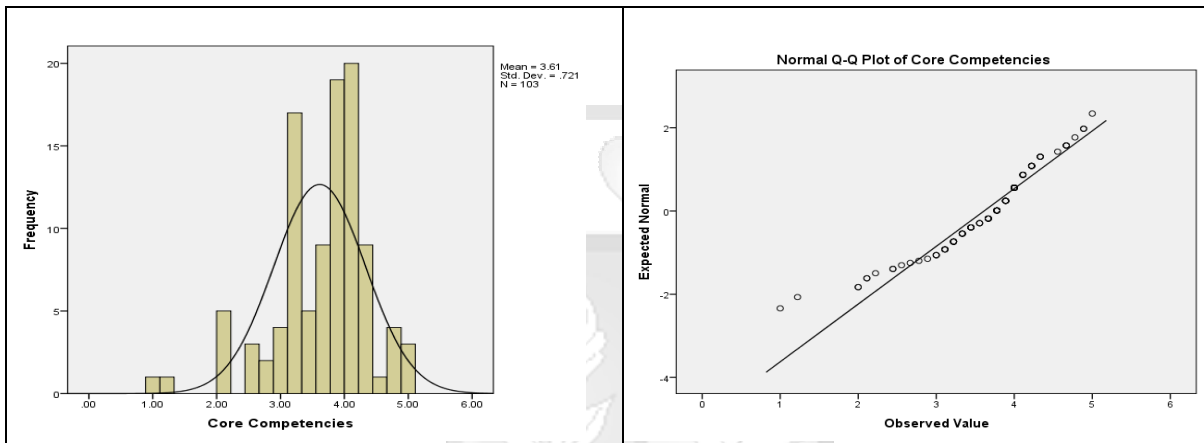
Figure 4.4: Threshold Competencies Distribution



Core Competencies

From the histogram, we can see that in the case for work satisfaction, distribution appears to have thick tail with outliers on the middle of the distribution. This implies that the data has heavy tails hence high leptokurtic kurtosis. Core competencies had mean of 3.61 and standard deviation of 0.721 as shown in Figure 4.5 below.

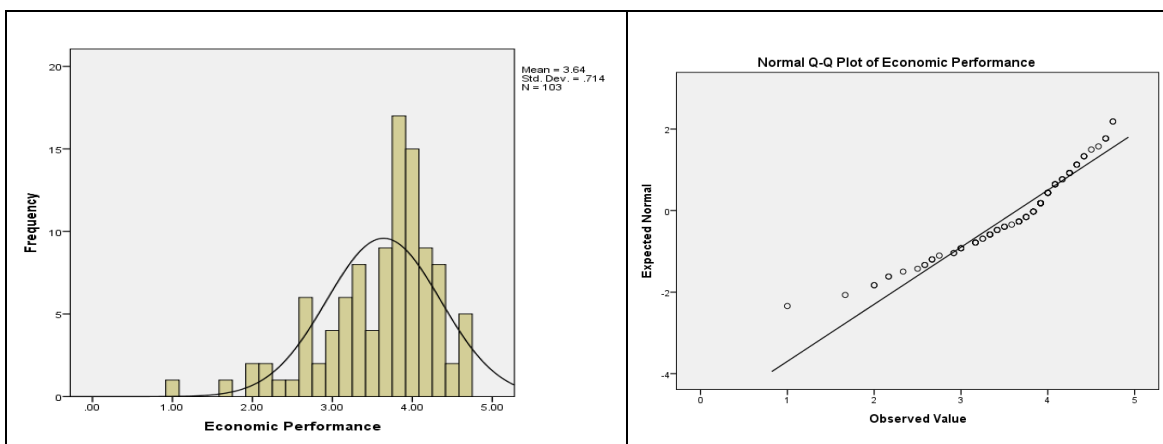
Figure 4.5:Core Competencies Distribution



Economic Factors

From the histogram, we can see that in the case for economic factors, distribution appears to be slightly skewed to the left as it has a slightly longer left tail. This implies that the data has heavy tails hence high kurtosis. The data has mean of 3.64 and standard deviation of 0.714 as shown in Figure 4.6 below.

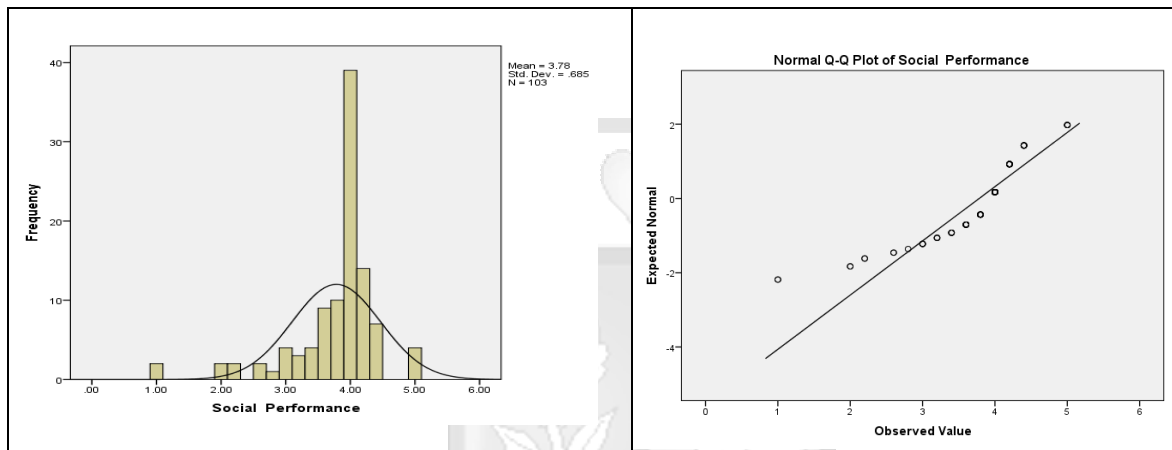
Figure 4.6:Economic Factors Distribution



Social Factors

From the histogram, we can see that in the case for social factors, distribution appears to be slightly skewed to the left as it has a slightly longer left tail. This implies that the data has heavy tails hence high kurtosis. The data has mean of 3.78 and standard deviation of 0.685 as shown in Figure 4.7 below.

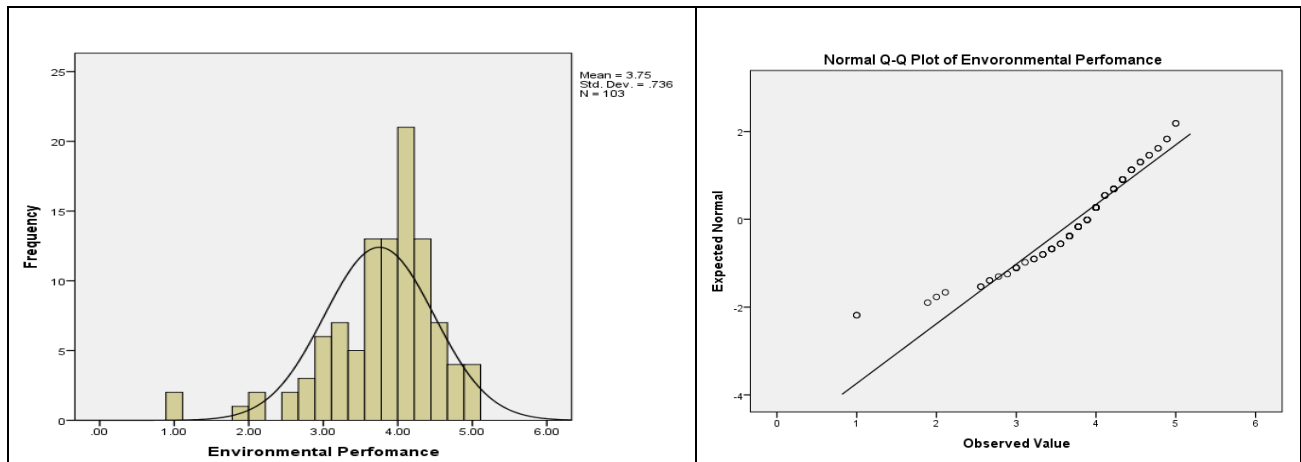
Figure 4.7: Economic Factors Distribution



Environmental Performance

From the histogram, we can see that in the case for environmental factors, distribution appears to be slightly skewed to the left as it has a slightly longer left tail. This implies that the data has heavy tails hence high kurtosis. The data had mean of 3.75 and standard deviation of 0.736 as shown in Figure 4.8 below.

Figure 4.8: Environmental Factors Distribution



Shapiro-Wilk Test and Kolmogorov-Smirnova Test

The two tests were utilized along with the degrees of freedom parameter to examine for normality in our study variables. The test for normality indicates that at the 5% significance level ($\alpha=0.05$) If the p-value (Prob>Z) is <0.05 , it indicates non-normality hence we reject H_0 that the variable is normally distributed, while p-value > 0.05 shows that the variable is normally distributed; hence we fail to reject H_0 .

The significant level coefficient for tangible resources, intangible resources, threshold competencies, core competencies, economic factors, social factors, and environmental factors are less than 0.05 for both tests, hence we reject null hypotheses for variables and deduce that they are not normally distributed at 5 per cent significant level as shown d on the results by Kolmogorov-Smirnova and Shapiro-Wilk normality tests as shown via Table 4.18 below.

Table 4.18: Normality Tests

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Threshold competencies	.217	103	.000	.863	103	.000
Environmental Performance	.153	103	.000	.910	103	.000
Social Performance	.246	103	.000	.801	103	.000
Economic Performance	.150	103	.000	.925	103	.000
Intangible resources	.194	103	.000	.896	103	.000
Tangible resources	.224	103	.000	.874	103	.000
Core Competencies	.134	103	.000	.928	103	.000

a. Lilliefors Significance Correction

4.6.2 Test of Multicollinearity

Multicollinearity test examines for the presence of relationship between independent variables. Regression experience multicollinearity if two or more predictor variables have high correlation with each another and do not contribute independent information to regression model. High correlation degree can cause issues when fitting and interpreting regression model. Multicollinearity was examined using the variation inflation factors (VIF) and tolerance limits. When the assumption of no multicollinearity is violated, the collinear variables can inflate the significant levels resulting in spurious results.

The general rule of thumb for VIF and tolerance levels is that a VIF of 1 showcase that variables are not correlated while a value of 1-5 showcase that variables are moderately correlated, while any value >5 indicates that the variables are highly correlated. Any VIF value more than 10 denotes extreme correlation, and a tolerance limit lower than 0.1 does so as well, which warrants further investigation (Glen, 2015 & Thompson et al., 2017). From Table 4.19 below, most of the variables are moderately correlated.

Table 4.19: Multicollinearity Test (VIF)

		Coefficients	
		Collinearity Statistics	
Model		Tolerance	VIF
1	Core Competencies	.356	2.811
	Tangible resources	.334	2.997
	Intangible resources	.210	4.762
	Threshold competencies	.179	5.600

a. Dependent Variable: performance

4.6.3 Correlation Matrix

The study did a correlation analysis to examine direction and magnitude of the relationship amongst strategic capabilities, economic factors, social factors and environmental factors amongst commercial airlines in Kenya. The Findings (Table 4.4) imply that variables had positive and significant relationship with each as indicated by their high rho values and p-values below the 1% significant level. Threshold competencies were found to have a positive and significant correlation with environmental performance ($\rho = 0.734$, $p\text{-value} = 0.000$), social performance ($\rho = 0.630$, $p\text{-value} = 0.000$), economic performance ($\rho = 0.754$, $p\text{-value} = 0.000$), intangible resources ($\rho = 0.864$, $p\text{-value} = 0.000$), tangible resources ($\rho = 0.810$, $p\text{-value} = 0.000$) and core competencies ($\rho = 0.763$, $p\text{-value} = 0.000$). The rest are as show in table 4.20 below.

Table 4.20: Correlation Matrix

		Threshold competencies	Environmental Performance	Social Performance	Economic Performance	Intangible resources	Tangible resources	Core Competencies
Threshold competencies	Pearson Correlation	1	.724**	.683**	.754**	.864**	.810**	.763**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	103	103	103	103	103	103	103
Environmental Performance	Pearson Correlation	.724**	1	.813**	.768**	.726**	.605**	.749**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	103	103	103	103	103	103	103
Social Performance	Pearson Correlation	.683**	.813**	1	.712**	.652**	.587**	.627**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	103	103	103	103	103	103	103
Economic Performance	Pearson Correlation	.754**	.768**	.712**	1	.704**	.620**	.749**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	103	103	103	103	103	103	103
Intangible resources	Pearson Correlation	.864**	.726**	.652**	.704**	1	.748**	.783**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	103	103	103	103	103	103	103
Tangible resources	Pearson Correlation	.810**	.605**	.587**	.620**	.748**	1	.617**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	103	103	103	103	103	103	103
Core Competencies	Pearson Correlation	.763**	.749**	.627**	.749**	.783**	.617**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	103	103	103	103	103	103	103

4.6.4 Model Fit Test

The study carried out Chi-square test to determine if ordinal regression is a good fit for the study data. From the results in Table 4.21, the significance level $0.000 < 0.05$ hence we fail to reject the null hypothesis and conclude that ordinal regression model is a good fit for the variables under study.

H_0 : Ordinal regression is a good fit for the data

Table 4.21: Model Fit Test

Model Fitting Info.				
Model	-2 Log, Likelihood	Chi-Square	df	Sig.
Intercept Only	597.424			
Final	509.121	88.302	4	0.000
Link function: Logit.				

4.7 Ordinal Regression

The study utilized ordinal regression to estimate the inferential statistics of the variables under study, that is, how strategic capabilities influence economic, social, and environmental performance of domestic commercial airlines in Kenya. From the results below, we observe the following.

4.7.1 Strategic Capabilities and Economic Performance of Domestic Commercial Airline in Kenya

From the results, we can deduce that for every unit increment in tangible resources, there is a predicted increment of 0.298 in the long odds of economic performance of domestic commercial airlines in Kenya. However, with a p-value of (sig.) of 0.473, it was found not to be statistically significant at the 5% level. This implies that tangible resources had a positive effect on the economic factors of the domestic commercial airlines but were insignificant. The results of this study are in agreement with Ong'esa & Kinyua (2020), who found that human resource, marketing, operational performance, communication, information, and technological capabilities possess a substantial gain to airline performance. The results also deviate from Mwangi (2013), who found that macroeconomic variables exerted a positive impact on ROA of the airlines in Kenya.

From the results, we can deduce that for every unit increment in intangible resources, there is a predicted decrease of 0.301 in the long odds of the economic performance of commercial airlines in Kenya. However, with a p-value of (sig.) of 0.511, it was found not to be statistically significant at the 5% level. This implies that tangible resources had a negative effect on the economic factors of the domestic commercial airlines but were insignificant. The results of this study are at odds with Pearson, Pitfield, and Ryley (2015) while examining six intangible resources for Asian airlines across three business models: low-cost subsidiaries from the network airlines, network airlines, and low-cost carriers using VRIN framework that intangible resources had a varied effect on airline performance. It also varies from the findings of Asiegbu, Igwe, and Akekue-Alex (2012), who opined that personnel competence, ambience, and service systems designs affected social aspects of economic performance (sales growth, profitability and market share,) of airlines in Nigeria. The results are also congruent with those of Alexander (2018), who examined the nexus between organizational performance and intellectual capital in the US airline sector. The findings showed a substantial, statistically significant correlation between the airline's financial performance and its use of intellectual capital.

From the results, we can deduce for every unit increment in threshold competencies, there is a predicted increment of 2.310 in the long odds of the economic performance of domestic airlines in Kenya. However, with a p-value of (sig.) of 0.010, it was found to be statistically significant at the 5% level. This implies that threshold competencies had a positive effect on the economic factors of domestic commercial airlines which were significant. The results of this study are in agreement with those of Batouei et al. (2019), who looked into the impact of airline service quality and flight crew competency and found that it had a positive effect on the airline's economic performance.

From the results, we can deduce that for a unit increment in core competencies, there is a predicted increment of 1.356 in the long odds of the economic performance of domestic commercial airlines in Kenya. However, with a p-value of (sig.) of 0.000, it was found to be statistically significant at the 1% level. This implies that core competencies had a positive effect on the economic factors of the domestic commercial airlines which were significant. This study's results agree with Boyd and Hollensen (2012), who argued that private airlines' core competencies were crucial determinants

of the airline's performance compared to public airlines. The results also agree with Ndubisi et al. (2015), Who found significant relationship. Additionally, the results are in tandem with Sarigül and Coşkun (2022), who found the nexus between innovative initiatives in Turkish civil airline and employee motivation, company economic performance, and customer happiness.

Table 4.22: Logit Regression of Strategic Capabilities and Economic Performance

Parameter Estimates	Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Economic Performance							
Tangible Resources	0.298	0.416	0.516	1	0.473	-0.516	1.113
Intangible resources	-0.301	0.457	0.432	1	0.511	-1.197	0.596
Threshold Competencies	1.356	0.523	6.713	1	0.010	0.330	2.382
Core Competencies	2.310	0.448	26.559	1	0.000	1.432	3.189

The resultant model of the study is of the form:

$$\text{Economic performance} = 0.298 * \text{Tangible factors} - 0.301 * \text{Intangible factors} + 1.356 * \text{Threshold competencies} + 2.310 * \text{Core Competencies}$$

4.7.2 Strategic Capabilities and Social Performance of Domestic Commercial Airline in Kenya

From the results, we can deduce that for every unit increment in tangible resources, there is a predicted decrease of -0.670 in the long odds of the social performance of domestic commercial airlines in Kenya. However, with a p-value of (sig.) of 0.803, it was statistically significant at the 5% level. This implies that tangible resources had a negative but insignificant effect on the social factors of domestic commercial airlines. The results of this study are in agreement with Pearson,

Pitfield & Ryley (2015), who found out that tangible resources had a positive impact on socioeconomic performance of 49 Asian airlines.

From the results, we can deduce that for every unit increment in intangible resources, there is a predicted increment of 0.262 in the long odds of the social performance of domestic airlines in Kenya. However, with a p-value of (sig.) of 0.511, it was statistically significant at the 5% level. This implies that tangible resources had a negative effect on the social factors of the domestic commercial airlines but were insignificant. This study's results agree with Alexander (2018) who found a substantial, statistically significant correlation between the airline's socio-economic performance and its utilization of intangible resources.

From the results, we can deduce that for every unit increment in threshold competencies, there is a predicted increment of 1.278 in the long odds of the social performance of domestic commercial airlines in Kenya. With a p-value of (sig.) of 0.015, it was statistically significant at the 5% level. This implies that threshold competencies had a positive effect on the social factors of the domestic commercial airlines which were significant. The results are in agreement with Makau & Nyangau (2022), who investigated and found that there exists a positive relationship between business process outsourcing and the social performance in selected of local airlines in Kenya.

From the results, we can deduce that for every unit increment in core competencies, there is a predicted increment of 6.389 in the long odds of the social performance of domestic commercial airlines in Kenya. With a p-value of (sig.) of 0.044, it was statistically significant at the 5% level. This implies that core competencies positively affected the social factors of the domestic commercial airlines, which were significant. The results agree with Wattanacharoensil and Yoopetch (2012), who found a positive nexus between core competencies in Thailand's airline industry service quality and the ground operations of the airline sector. A 2017 study on the input-process-output model of the 1,280 pilots' core competencies was conducted by Mansikka, Harris, and Virtanen, which showed that the airline's investment significantly improved pilots' individual and team performance in core competencies.

Table 4.23: Logit Regression of Strategic Capabilities and Social Performance

Parameter Estimates	Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Social Performance							
Ln_Tangible Resources	-0.670	2.682	0.062	1	0.803	-5.926	4.587
Intangible resources	0.262	0.465	0.317	1	0.574	-0.650	1.174
Threshold Competencies	1.278	0.526	5.895	1	0.015	0.246	2.309
Ln_Core Competencies	6.389	3.172	4.057	1	0.044	0.172	12.606

The resultant model of the study is of the form:

Social performance= -0.670*Tangible factors + 0.262*Intangible factors + 1.278*Threshold competencies + 6.389*Core Competencies

4.7.3 Strategic Capabilities and Environmental Performance of Domestic Commercial Airlines in Kenya

From the results, we can deduce that for every unit increment in tangible resources, there is a predicted decrease of -0.031 in the long odds of the environmental performance of domestic commercial airlines in Kenya. However, with a p-value of (sig.) of 0.941, it was found not to be statistically significant at the 5% level. This implies that tangible resources had a negative but insignificant effect on the environmental factors of domestic commercial airlines. The results of this study are in disagreement with Njeri and Susan (2018) who found out that investigated how the macroenvironmental factors had a positive effect on the environmental performance of Kenya's airline sector.

From the results, we can deduce that for every unit increment in intangible resources, there is a predicted increment of 0.496 in the long odds of the environmental performance of domestic commercial airlines in Kenya. However, with a p-value of (sig.) of 0.281, it was found not to be

statistically significant at the 5% level. This implies that tangible resources had a negative effect on the environmental factors of the domestic commercial airlines but were insignificant. The results are in agreement with Yu & Wang (2016), who found a positive nexus between intangible resources in the airline industry and environmental performance.

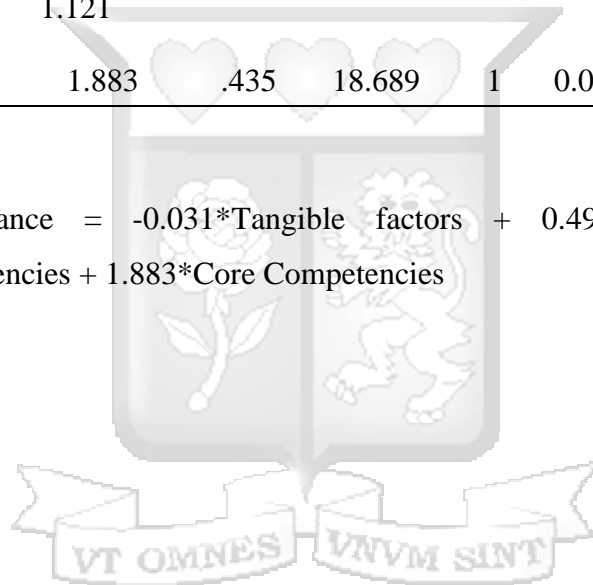
From the results, we can deduce that for every unit increment in threshold competencies, there is a predicted increment of 1.121 in the long odds of the environmental performance of domestic commercial airlines in Kenya. With a p-value of (sig.) of 0.031, it was found to be statistically significant at the 5% level. This implies that threshold competencies had a significant positive effect on the environmental factors of domestic commercial airlines. The results are in agreement with Morrison (2009) and Yu & Wang (2016), who found a positive nexus between threshold competencies resources in the airline industry and environmental performance.

From the results, we can deduce that for every unit increment in core competencies, there is a predicted increment of 1.883 in the long odds of the environmental performance of domestic commercial airlines in Kenya. However, with a p-value of (sig.) of 0.000, it was statistically significant at the 1% level. This implies that core competencies positively affected the social factors of the domestic commercial airlines, which were significant. The results are in agreement with Papatheodorou, Botterill, & Cantarella (2010) that the airline core business models and networks of low-cost and full-service carriers had a significant influence on their environmental performance, more so in regards to carbon footprint.

Table 4.24: Logit Regression of Strategic Capabilities and Environmental Performance

Parameter Estimates	Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Environmental Performance							
Tangible Resources	-0.031	.417	0.006	1	0.941	-0.849	0.787
Intangible resources	0.496	.460	1.164	1	0.281	-0.405	1.397
Threshold Competencies	1.121	.521	4.634	1	0.031	0.100	2.141
Core Competencies	1.883	.435	18.689	1	0.000	1.029	2.736

Environmental performance = -0.031*Tangible factors + 0.496*Intangible factors + 1.121*Threshold competencies + 1.883*Core Competencies



CHAPTER FIVE

DISCUSSIONS

5.1 Introduction

This chapter summarizes the study findings, makes conclusions, and draws recommendations from the findings.

5.2 Summary and Discussion of Study Findings

The main objective was to examine effect of strategic capabilities on performance of commercial airlines in Kenya. Specifically, the study looked at the influence of strategic capabilities on the economic performance, social performance, and environmental performance of Kenya's domestic commercial airlines. Primary data was collected by administering questionnaires among 103 respondents drawn from domestic commercial airlines in Kenya. Inferential and descriptive statistics were used to analyze data.

5.2.1 Strategic Capabilities and Economic Performance of Airlines

The first objective was to examine the effect of strategic capabilities on the economic performance of commercial domestic airlines in Kenya. From the results, we can deduce that for every unit increment in tangible resources, there was a predicted increment in the long odds of economic factors. This implies that tangible resources had a positive effect on the economic factors of domestic commercial airlines. The results are in agreement with Ong'esa & Kinyua (2020), who found that marketing, technology capabilities operational human resource, information, and communication possess significant gain to airline's performance. Tangible resources play a vital role in shaping economic factors of airlines by influencing operating costs, efficiency, reliability, and customer satisfaction. Effective management and strategic investment in these resources are essential for airlines to maintain competitiveness, profitability, and long-term sustainability in the dynamic airline industry.

For every unit increment in intangible resources, there was a predicted decrease in the long odds of economic factors of domestic and commercial airlines in Kenya, implying that intangible resources had a negative effect on the economic factors of the domestic commercial airlines but were insignificant. The results of this study are at agree with Pearson et al., (2015), who, while examining six intangible resources for Asian airlines discovered that intangible resources had a varied effect on airline performance. The findings vary from Asiegbu, Igwe, and Akekue-Alex (2012), who opined that ambience, service systems design and personnel competence affected the social aspects of economic performance (market share, sales growth, and profitability) of these airlines in Nigeria. The airline industry is highly competitive, and brand reputation plays a crucial role in attracting customers and generating revenue. Intangible assets such as brand recognition, reputation for safety, reliability, and customer service can influence consumer preferences and purchasing decisions. Airlines with strong brands and positive reputations may command premium prices for their services, leading to higher revenues and market share. Those with a bad reputation may be adversely affected, resulting in dents in their revenue streams.

From the results, we deduce that for a unit increment in threshold competencies, there was a predicted increment in the long odds of economic factors of domestic commercial airlines in Kenya, which were statistically significant. This implies that threshold competencies positively affected the economic factors of domestic commercial airlines. The results are congruent with those of Batouei et al. (2019), who looked into the impact of flight crew competency and airline service quality found that it significantly impacted loyalty, revenue streams, and profitability in Asia. Ensuring safety and compliance with airline regulations is a fundamental threshold competency for airlines. Adhering to safety standards protects passengers and crew and helps maintain public trust and confidence in air travel. Failure to meet stringent safety requirements can lead to accidents, disruptions, legal liabilities, and reputational damage, impacting the economic performance of airlines through increment in operational costs, litigation expenses, and loss of customers.

From the results, we can deduce that for a unit increment in core competencies, there is a predicted increment in the long odds of economic factors of domestic commercial airlines in Kenya. This implies that core competencies had a significant positive effect on the economic factors of domestic commercial airlines. Core competencies entail unique strengths and capabilities that distinguish a

company from its competitors and enable it to create value for customers. In the context of airlines, Core competencies such as efficient aircraft utilization, streamlined ground operations, and optimized crew scheduling can enable airlines to achieve lower unit costs and higher margins, contributing to better economic performance.

5.2.1 Strategic Capabilities and Social Performance of Airlines

An increment in tangible resources had a negative impact on the social factors of domestic commercial airlines in Kenya. Tangible resources enable airlines to invest in airport infrastructure, aircraft fleet, and ground facilities, enhancing passengers' overall travel experience. Modern terminals, well-equipped aircraft, and efficient ground handling services contribute to passenger comfort, convenience, and satisfaction, promoting positive social interactions and travel experiences. Tangible resources, such as aircraft fleet expansion and infrastructure development, create employment opportunities for local communities in Kenya. Airlines investing in fleet renewal, route expansion, and airport development generate jobs in various sectors, including airline, hospitality, tourism, and support services, contributing to social mobility, economic empowerment, and poverty reduction.

The Increment in intangible resources positively impacted the social factors of domestic commercial airlines in Kenya. A strong brand reputation and positive brand image are intangible resources that can enhance the social standing of airlines in Kenya. Airlines with a reputation for reliability, safety, and customer service excellence contribute to public trust and confidence in air travel, thereby promoting social well-being and peace of mind among passengers and communities. Intangible resources related to customer satisfaction, such as responsiveness, service quality, and empathy, can foster positive social interactions and experiences among passengers. Airlines prioritising customer satisfaction contributes to passenger loyalty, word-of-mouth recommendations, and positive social interactions onboard and within airport facilities.

An increment in threshold competencies positively impacted the social factors of domestic commercial airlines in Kenya. By maintaining high safety standards in aircraft maintenance, pilot training, and operational procedures, domestic commercial airlines can enhance passenger confidence, trust, and peace of mind, thereby contributing to social well-being and public trust in

air travel. Airlines that provide courteous and efficient service contribute to positive social interactions, passenger satisfaction, and overall travel experiences, fostering a sense of camaraderie and community amongst travellers. Ensuring accessibility and inclusivity for all passengers, including persons with disabilities, elderly individuals, and passengers with diverse needs, is a fundamental social responsibility for airlines. By implementing accessible facilities, staff training programs, and inclusive policies, airlines promote equal opportunities, dignity, and respect for all passengers, thereby fostering social inclusion and diversity in air travel.

Increment in core competencies positive impact on social factors of domestic commercial airlines in Kenya. Competencies in safety management, pilot training, and maintenance practices contribute to ensuring the safety and security of passengers, crew, and cargo. By adhering to rigorous safety standards and investing in continuous training and technology upgrades, airlines enhance public trust and confidence in air travel, thereby promoting social well-being and peace of mind among travellers. Domestic commercial airlines prioritising customer satisfaction through personalized service, efficient handling of inquiries and complaints, and attention to passenger comfort contribute to positive social outcomes by promoting traveller satisfaction, loyalty, and word-of-mouth recommendations within the community.

5.2.1 Strategic Capabilities and Environmental Performance of Airlines

The study found that tangible resources had an adverse impact on the environmental performance of commercial airlines in Kenya. However, intangible resources were found to positively impact the environmental performance of domestic commercial airlines in Kenya. Both tangible and intangible resources are essential for domestic commercial airlines in Kenya to achieve positive social outcomes. Tangible resources such as modern aircraft with fuel-efficient engines and lightweight materials contribute to reducing fuel greenhouse gas emissions per passenger kilometre. Airlines that invest in newer, more fuel-efficient aircraft fleets can lower their carbon footprint and minimize environmental impact. Tangible resources allocated to airport infrastructure upgrades, air traffic management systems, and ground handling equipment can improve operational efficiency and reduce fuel burn during taxiing, take-off, and landing. Investments in modern, eco-friendly airport facilities and ground support equipment contribute to environmental sustainability. Intangible resources related to innovation and technology adoption drive environmental sustainability within the airline industry. Airlines that leverage intangible resources to invest in research and development of sustainable airline technologies, such as electric propulsion, hydrogen

fuel cells, and sustainable airline fuels, contribute to reducing carbon emissions and environmental impact.

The study also found that threshold and core competencies positively affected the environmental performance of domestic commercial airlines in Kenya. Threshold competencies in basic waste management practices ensure that airlines handle and dispose waste materials sustainably and responsibly. Airlines can minimise their environmental footprint and promote resource conservation by implementing waste reduction, recycling, and disposal protocols. Also, threshold competencies related to safety protocols and risk management procedures indirectly contribute to environmental sustainability by reducing the likelihood of accidents, incidents, and environmental emergencies. Airlines prioritising safety culture and adherence to safety standards minimize the risk of environmental damage caused by airline-related incidents. Core competencies in stakeholder engagement and corporate social responsibility (CSR) enable airlines to collaborate with governments, NGOs, industry partners, and local communities to address environmental challenges and promote sustainable development. Core environmental management systems (EMS) competencies enable airlines to implement proactive measures for monitoring, measuring, and managing environmental performance. By adopting EMS standards, such as ISO standards, airlines can identify areas for improvement, set environmental targets, and implement strategies to reduce environmental impact.

5.3 Conclusion

Based on results, the study demonstrated that while intangible resources have a negative impact on the economic performance of the commercial domestic airlines, tangible resources, threshold, and core competencies had a positive effect. Airlines' strategic skills play a crucial role in propelling economic performance by augmenting their competitiveness, efficiency, responsiveness, innovation, brand image, and adaptability. Consequently, domestic commercial airlines should make an investment developing and in enhancing and utilizing their strategic capabilities as they will be more adept at navigating the intricacies of the airline industry, attaining long-term expansion, and providing value to stakeholders such as consumers and shareholders.

Intangible resources, threshold and core competencies had a positive impact on social performance of the airlines while tangible resources were found to have an adverse effect. Beyond financial

concerns, airlines' social performance includes their impact on stakeholders, communities, and society. These factors can be influenced by their strategic capabilities. Airlines strategic capabilities extend beyond their financial performance to encompass their social impact and influence. Airlines can fulfill their social responsibility and make a beneficial impact on society by utilizing their skills to promote safety, sustainability, diversity, accessibility, health, and resilience.

Also, intangible resources, threshold and core competencies had a positive impact on environmental performance of the airlines while tangible resources were found to have an adverse effect. Hence there is a need for commercial domestic airlines to reduce their carbon footprint and adopt sustainable practices in their operations. Strategic capabilities related to environmental sustainability can mitigate the environmental impact of airline operations, such as carbon emissions, noise pollution, and waste generation.

Strategic capabilities of airlines play a critical role in shaping their environmental performance by enabling them to adopt fuel-efficient technologies, optimize operations, invest in alternative fuels, implement emission reduction programs, manage environmental risks, and engage with stakeholders. By leveraging their capabilities effectively, airlines can minimize their environmental footprint, mitigate climate change impacts, and contribute to a more sustainable airline industry.

5.4 Recommendations

Tangible resources have a significant impact on operational costs, reliability, efficiency, and customer happiness, all of which shape the economic aspects of airlines. Airlines must manage these resources well and make smart investments in order to stay profitable, competitive, and long-term and enhance management. In regards to enriching the Resource-Based View (RBV) theory, the study recommends that the airlines focus on leveraging its unique resources and capabilities, such as brand reputation, operational expertise, and customer loyalty programs, to achieve a competitive advantage. Domestic commercial airlines are also encouraged to develop the ability to rapidly adapt and reconfigure resources and processes in response to changing market conditions and technological advancements in line with dynamic capability theory.

Also, the study recommends that airlines in Kenya invest in modern and fuel-efficient aircraft to enhance their operational efficiency, reduce fuel costs, and improve environmental sustainability. Emphasize the importance of fleet renewal programs and leasing arrangements to optimize fleet composition and flexibility. The high potential for growth in intra-Africa air travel with the ratification of African Continental Free trade area (AfCFTA) also highlights the importance of domestic airlines in maximizing their threshold and core competencies by establishing strong partnerships and alliances with regional carriers to minimize costs and extend their reach.

Domestic commercial airlines should also prioritize investments in customer service training, amenities, and digital technology to enhance the passenger experience and brand loyalty. The management is encouraged to enhance loyalty programs in order to offer more value to the frequent flyers, including tiered benefits and partnerships with other service providers.

Emphasize the importance of personalized services, seamless connectivity, and innovative initiatives such as mobile booking platforms and inflight entertainment systems to enhance customer experience to boost the number of passengers and revenues. Airlines are also encouraged to diversify revenue streams beyond traditional ticket sales by offering ancillary services such as cargo transportation, lounge access, and loyalty programs. Highlight opportunities for airlines to capitalize on emerging trends such as e-commerce logistics, medical tourism, and leisure travel packages. Domestic commercial airlines should also explore strategic partnerships, codeshare agreements, and alliance memberships to expand their network reach, optimize route planning, and leverage economies of scale.

Airlines can leverage their strategic capabilities to optimize fuel management practices and explore alternative fuels to reduce their environmental footprint. Strategic partnerships with biofuel producers, research institutions, and government agencies can facilitate the development and adoption of sustainable airline fuels (SAFs) made from renewable sources such as biomass, waste, or algae. Airlines that invest in SAFs can significantly reduce their carbon emissions and contribute to the decarbonization of the airline sector. Additionally, the national government is urged to assist the airline industry by developing and putting into effect policy interventions such as stricter safety standards and that foster an environment that is favorable to the airline sector in Kenya. These interventions may include modernizing airspace, developing infrastructure, reforming regulations,

and offering financial incentives to encourage investment, innovation, and industry competitiveness.

5.5 Study Limitations

The cross-sectional study collected data at one point in time, simultaneously capturing multiple variables, hence it is difficult to establish trends or variable patterns over time. That limits its ability to do a comparison unlike a panel data study which captures cross sectional data over a period of time. Without longitudinal data, it is difficult to assess whether changes in strategic capabilities precede changes in performance or vice versa. To deepen the understanding of the relationship between strategic capabilities and domestic commercial airlines performance, the study recommends for a panel analysis of this study to be done. Findings from cross-sectional studies may lack generalizability to other contexts or populations beyond the sample studied. The study's results may be specific to the domestic commercial airlines, time period, or industry conditions included in the study and may not apply to other domestic commercial airlines or regions. Replication studies using diverse samples is encouraged to reinforce the study findings.

5.5 Suggestions for Further Research

The study looked at strategic capabilities and how they affect domestic commercial airlines in Kenya. To widen the scope, future studies are encouraged to look at international commercial airlines that operate in Kenya as this would give more insight if there are inherent similarities or differences in strategic capacities between them and how that affects their performance. Building on this the study can extend the analysis to include other sectors of the airline industry, such as cargo airlines, charter operators, or airport services providers. By exploring how strategic capabilities influence performance in different sectors, researchers can gain insights into the broader ecosystem of the airline industry and its interconnectedness. Subsequent studies should also investigate how the impact of strategic capabilities on performance varies across different regions or countries. Factors such as market size, regulatory environment, infrastructure quality, and competitive dynamics may influence the effectiveness of strategic capabilities in driving performance outcomes in different geographic contexts.

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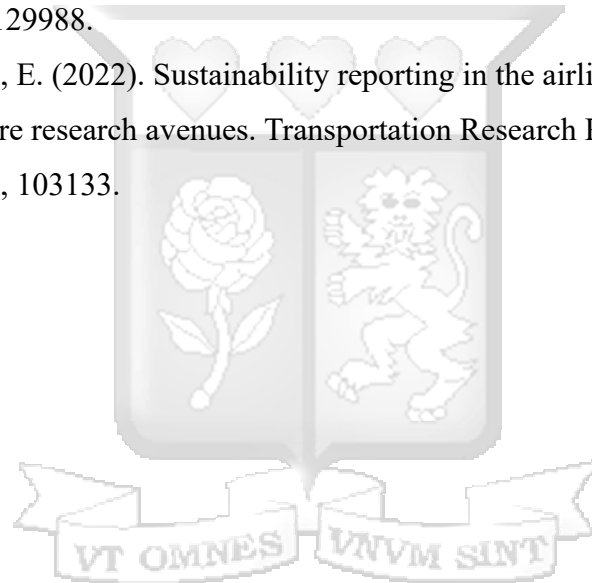
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Appendices

Appendix I: The Consent Form

Study Title: Effect of Strategic Capabilities on Firm Performance: The Case for Commercial Airlines in Kenya

Description of Study

You are duly invited to participate in this survey done by Mr. Francis Ngumbi, a student of Master at Strathmore University. Participation is strictly voluntary and will involve filling out a physical questionnaire.

Risks

No risks are anticipated with taking part in the survey.

Perceived benefits

The perceived benefits from the study includes the partial fulfillment for the award of Master of Commerce at Strathmore University. The findings will enrich existing body of literature and provide feedback to respective institution for improvement of service.

Confidentiality

The data collected from this study was be treated with confidentiality. The participant's anonymity was always be maintained during and after this study. Only personnel involved in the study had access to the data collected. The data collected will be secured and only utilized for this research.

Eligibility

The employees of domestic commercial airlines in kenya are eligible to participate in this study. Also, all the participate in this study will be adults aged 18 year and over. Minors will not be eligible to participate in the study.

Voluntary participation

Your participation in the study will be strictly voluntary. You may opt to participate or reject at any time by accepting or withdrawing your consent. No penalties will be charged should you decide to withdraw your consent from this study. Also, there will be no monetary compensation for participating in the study or otherwise is expected.

Contact information

Please contact Mr. Francis Ngumbi for clarifications and inquiries on the consent,

Mr. Francis Ngumbi

Cell no:

Email:

Strathmore University Business School

Contact my supervisor.

Dr. Stella Nyongesa

Strathmore University Business School

E-mail:

Cell No:

If you have any independent questions concerning this research, please get in touch with:

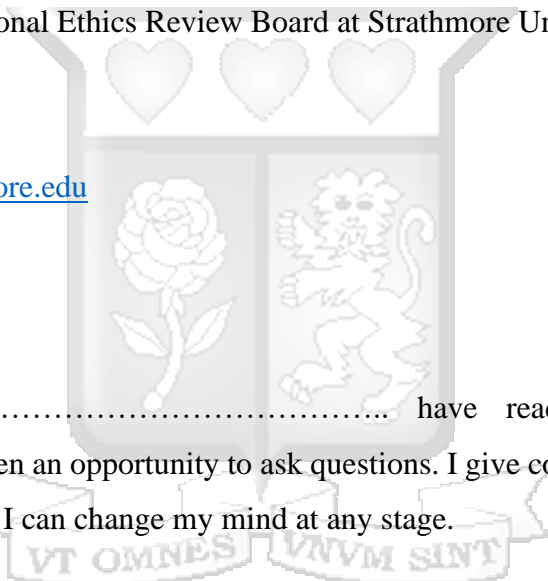
The Secretary of the Institutional Ethics Review Board at Strathmore University

P. O. BOX 59857, 00200,

Nairobi, Kenya.

email ethicsreview@strathmore.edu

Tel No: +254 703 034418



Consent

I..... have read and understood this consent. I have also been given an opportunity to ask questions. I give consent to participate in the study. I fully understand that I can change my mind at any stage.

I agree to participate in the study

I do not agree to participate in this study

Data Storage

I agree to have my data stored for future data analysis

I do not agree to have my data stored for future data analysis

Signed by participant _____ Date: ____/____/____
Date / Month / Year

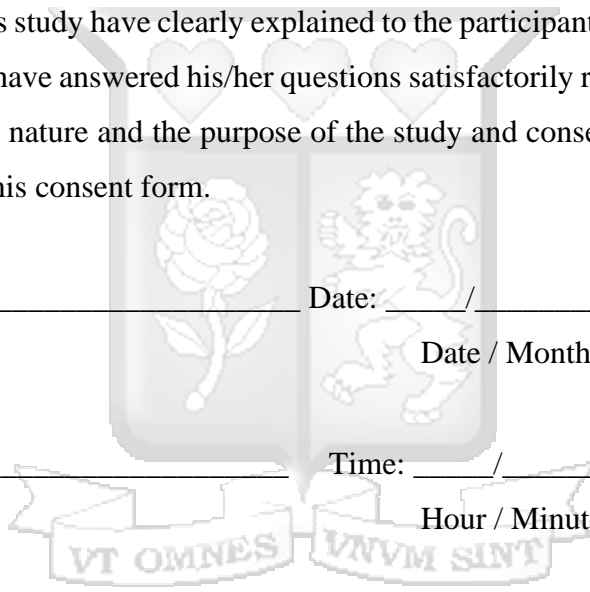
Participant's Name _____ Time: ____/____
Hour / Minute

Declaration by the principal investigator

I..... certify that I have followed the SOP guidelines for this study have clearly explained to the participant the purpose and expected benefits of this study and have answered his/her questions satisfactorily regarding this research and he/she has understood the nature and the purpose of the study and consents to the participation in the study on the date on this consent form.

Signed by investigator _____ Date: ____/____/____
Date / Month / Year

Investigator's Name _____ Time: ____/____
Hour / Minute



Appendix II: Questionnaire

SECTION A: Demographics

1. Which commercial airline in Kenya is your employer?

.....

2. What is your gender?

Male [] Female []

3. Which Department in the airlines do you work in?

Customer service [] Marketing [] Operations [] Finance []

Aircraft maintenance [] Other []

4. What is your highest education level?

Certificate [] Diploma [] Graduate [] post graduate [] Other

[]

5. How long has the airline been operational?

Below 1 year [] 1-5 years [] 6-10 years []

11-15 years [] 16-20 years [] Over 20 years []

6. How many people has the airline employed?

Below 50 [] 51-100 [] 101-150 []

151-200 [] 201-250 [] Over 250 []

251-300 [] 301-350 [] Over 350 []

7. How many planes does the airline operate?

Below 5 [] 6-10 [] 11-15 []

15-20 [] 21-25 [] Over 25 []

8. What type of planes does the airline use?

Wide-body airliners [] Narrow-body aircraft [] Mid-sized jets []
 Heavy jets [] Turboprop aircraft [] Light-jets []
 Others []

9. How many offices does the airline have?

1 [] 2-4 [] 5-7 []
 8-10 [] 11-15 [] Over 15 []

Section B: Tangible Resources

To what extent do you rate the statements on tangible resources in enhancing the performance of your airlines? Kindly tick (✓) the appropriate box.

Strongly disagree =1, Disagree =2, Uncertain=3, Agree= 4, and strongly agree =5.

No.	Statements	1	2	3	3	5
11	The cash earned from the airline’s operations					
12	The physical structures (machinery, electronics, tools and equipment)					
13	Buildings (offices, warehouse, garage and repair shops, stores, parking space)					
14	The airline’s financial investments (financial instruments, shares, equity positions)					

Section C: Intangible Resources

To what extent do you rate your firm’s intangible resources in enhancing the performance of your airlines? Kindly tick (✓) the appropriate box.

Strongly disagree =1, Disagree =2, Uncertain=3, Agree= 4, and strongly agree =5.

No.	Statements	1	2	3	3	5
15	The airline has managed to uphold a distinct brand reputation in the commercial airline industry					
16	The airline’s organizational culture has been pivotal to its seamless operations					
17	The airlines legally protected copyrights, software, trademarks, designs, website and patents					
18	The shared values, beliefs, attitude and behavior of employees and managers					
19	The operating and reporting structure of the airlines					
20	Legally protected copyrights, trademarks, designs and patents					

Section D: Threshold Competencies

To what extent do you rate the commercial airline's threshold competencies in enhancing its performance? Kindly tick (✓) the appropriate box.

Strongly disagree =1, Disagree =2, Uncertain=3, Agree= 4, and strongly agree =5.

No.		1	2	3	3	5
21	Ensuring the safety and security of passengers, crew, and aircraft					
22	The airline has competent staff who deliver end-to-end high-quality service, including ticketing, check-in, boarding, in-flight experience, and issue resolution.					
23	The airline takes precedence in managing its fleet as well as the effective maintenance and repair processes to ensure aircraft's airworthiness and reliability.					
24	The airline adheres to regulatory compliance with various regulatory requirements imposed by airline authorities					
25	The airline has robust financial management capabilities to sustain its operations					
26	The airline has made initiatives to maintain control over the production, operational and overhead expenses by controlling costs along the existing activity cost chain					
27	The airline benchmarks its product and services costs against the competing airlines to exploit the existing comparative advantages					

Section E: Core Competencies

To what extent do you rate the following core competencies in enhancing your airlines performance? Kindly tick (✓) the appropriate box

Strongly disagree =1, Disagree =2, Uncertain=3, Agree= 4, and strongly agree =5.

No.		1	2	3	3	5
28	The airline has identified a market niche for passengers within the industry					
29	The airline has come up with unique low-priced products and services that enhances value for a specific customer segment or market niche					
30	The airline markets unique products for varied customer groups					
31	The airline has adopted unique technology to remain on the cutting edge of innovation in the low-cost products and services					
32	The airline offers customers-chartered flights with low carbon emissions					
33	The airline is a low-cost carrier in the airline industry					
34	The airline's customers are less sensitive to change in prices					
35	The airline has forged collaborations with other established airlines to expand its network reach, enhance passenger traffic, and provide seamless travel options.					

36	The airlines has talent development and employee engagement initiatives to attract and retain top talent and cultivating a skilled workforce					
37	The airline's cost advantage is attained through a restructuring of the cost chain which eliminates all unnecessary cost producing activities					

Section F: Performance of Airlines

F1: Please rate the following performance variables of your airlines for the last 10 years.

Economic Performance

No.		1	2	3	3	5
38	The airline has registered a tremendous growth in its gross profit margin over the last decade					
39	The airline's profitability is evident in the range of routes and destinations it offers.					
40	The airline's Return on Assets (ROA) performance indicates its economic strength					
41	The airline effectively manages its operational costs.					
42	The airline's revenue growth reflects its competitive ticket prices compared to other airlines.					
43	The airline's Passenger Revenue per Available Seat Mile (PRASM) has grown rapidly over the last decade					
44	The he averages revenue generated per passenger or per kilometer flown (yield) is a true reflection of the airlines pricing effectiveness.					
45	The airline's sales in tickets and cargo hauls have grown immensely over the last decade					
46	The airline's marketing efforts influence customers decision to purchase tickets.					
47	The airline's sales performance reflects its understanding of customer demands.					
48	The airline's sales performance impacts its overall perception of its brand.					
49	The airline's sales performance affects its ability to expand its customer base.					
50	The airline effectively communicates the value of its services through its sales efforts.					

Social Performance

To what extent do you rate the following social performance metrics in your airlines? Kindly tick (✓) the appropriate box

Strongly disagree =1, Disagree =2, Uncertain=3, Agree= 4, and strongly agree =5.

No.		1	2	3	3	5
-----	--	---	---	---	---	---

51	The airline has CSR initiatives focused on supporting social causes					
52	The airline has made initiatives to promote diversity, inclusivity and representation amongst its workforce and leadership in addition to promoting fair treatment and equal opportunities for all employees.					
53	The airline prioritizes passenger safety and well-being by maintaining high safety standards, enhancing ease of access to passengers with disability to provide a comfortable travel experience.					
54	The airline has made initiatives to enhance the well-being of staff by supporting work-life balance, health and wellness programs and creating a conducive and supportive work environment					
55	The airline regularly engages with stakeholders (passengers, employees, suppliers, and the local communities) to understand their needs, address concerns, and incorporate their perspectives in decision-making processes.					

Environmental Performance

To what extent do you rate the environmental performance metrics in your airlines? Kindly tick (✓) the appropriate box

Strongly disagree =1, Disagree =2, Uncertain=3, Agree= 4, and strongly agree =5.

No.		1	2	3	3	5
56	The airline participates in carbon offsetting programmes to compensate for their carbon emissions					
57	The airline has can implement effective waste management practices to minimize waste generation and promote recycling and proper disposal of materials					
58	The airlines explore or has made initiatives to invest in alternative fuels, such as sustainable airline fuels (SAFs) or biofuels, to lower carbon emissions.					
59	The airline has made initiatives to reduce aircraft noise pollution within the airports and its immediate surroundings					
60	The airline has commitment to environmental performance by publishing annual sustainability reports					
61	The airline adheres to the environmental regulations and standards imposed by the airline authorities					

Section G: Open-ended Questions

62: Which tangible and intangible resources has the airline adopted to enhance its performance and what is the reason behind them?

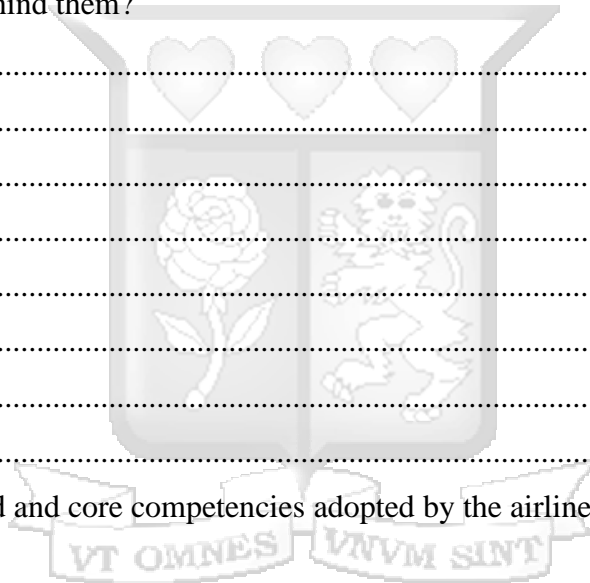
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63: How has the tangible and intangible resources adopted by the airline affected its performance?
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64: Which threshold and core competencies has the airline adopted to enhance its performance and what is the reason behind them?



65: How has the threshold and core competencies adopted by the airline impacted its performance?
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Appendix III: Ethical Clearance from SU-IERC



4th April 2024

Mr Mutua Francis,
francisngumbi@gmail.com

Dear Mr Mutua,

RE: Effects of Strategic Capabilities on Sustainable Performance: The Case for Commercial Domestic Airlines in Kenya

This is to inform you that SU-ISERC has reviewed and approved your above SU-masters research proposal. Your application reference number is SU-ISERC2061/24. The approval period is from 4th April 2024 to 3rd April 2025.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
- iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
- v. Clearance for the export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.


Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.

Yours sincerely,

Mr Ambrose Rachier,
Chairperson; SU-ISERC




Appendix IV: Ethical Clearance from NACOSTI



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Date of Issue: 17/April/2024

RESEARCH LICENSE




This is to Certify that Mr.. Francis Ngumbi Mutua of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: EFFECTS OF STRATEGIC CAPABILITIES ON SUSTAINABLE PERFORMANCE: THE CASE FOR COMMERCIAL DOMESTIC AIRLINES IN KENYA for the period ending : 17/April/2025.

License No: NACOSTI/P/24/34629

Applicant Identification Number 154172

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code



NOTE: This is a computer generated License, To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix IV: Budget

Activity	Number.	Rate	Days	Ksh.
1. Printing fee				
▪ Proposal Printing	2	300	1	600
▪ Full project Printing	2	300	1	600
▪ Miscellaneous				1500
Sub Total 1				2,700
2. Data Collection costs				
▪ Communication		Lump-sum		2,000
▪ Report cost		Lump-sum		2,000
▪ Contingency		Lump-sum		2,500
▪ Research Assistants	1	3000	10	30000
Sub Total 2				6,500
Grand Total (Ksh)				39,300

Appendix V: Work plan

	March 2023	April 2023	November 2023	January 2024	February 2024	March 2024	April 2024	May 2024
Writing the proposal								
Proposal defence								
Ethical Approvals								
Training research Assistant								
Pre-testing tools								
Collection of data								
Data entry and analysis								
Report writing								
Project defense								
Manuscripts' publication								

Appendix VI: Operational Commercial Domestic Airlines in Kenya

No.	Airlines
1	Kenya Airways Ltd
2	Jambo Jet
3	Air Kenya
4	Bluebird Airline Ltd
5	Astral Airline Ltd
6	Freedom Airline
7	East African Safari Air Express
8	Boskovic Air Charters
9	748 Air Services
10	Safarilink Airline
11	Skyward Express Ltd
12	ALS Limited
13	Renegade Air
14	Mombasa Air

Data Source: Kenya' Civil Airline Authority (2024)

